NLC TAMILNADU POWER LIMITED

एनएलसी तमिलनाडु पावर लिमिटेड

(A JVC of NLC India Ltd & TANGEDCO and a subsidiary of NLC India Ltd)

OFFICE OF THE CHIEF EXECUTIVE OFFICER

मुख्य कार्यकारी अधिकारी का कार्यालय

NTPL

2 X 500 मेगावाट संयुक्त उद्यम ताप विद्युत परियोजना हारबर इस्टेट, टुटिकोरिन

2 X 500 MW JV Thermal Power Project, Harbour Estate, Tuticorin- 628004

CIN: U40102TN2005GOI058050

Fax: 0461-2352480 Phone: 0461-2352844 E-mail: ceo.ntpl@nlcindia.in Web: www.ntplpower.com

Lr. No. CEO/NTPL/Tariff 2024-29/95/2024-25 **Dt: 28-11-2024**

To

The Secretary,

Central Electricity Regulatory Commission,

3rd& 4th floor, Chanderlok Building,

36, Janpath Marg, **NEW DELHI - 110 001.**

Sir,

Sub: **NLC TAMILNADU POWER LIMITED (NTPL) - 2 x 500 MW Coal based Thermal Power Station** – Petition seeking determination of Tariff under Regulations 2024 for the period from 01.04.2024 to 31.03.2029 - Reg.

Ref: 1. CERC (Terms and Conditions of Tariff) Regulations 2024.
2. CERC Order dated 21.06.2024 in Petition No. 528/GT/2020 (Truing up Petition 2014-19)
3. CERC Order dated 01.08.2024 in Petition No. 254/GT/2020 (Tariff Petition 2019-24)

*****

Please find the enclosed Petition seeking fixation of Tariff (Annual Fixed Charges and Energy Charges) for the period 2024-29 under the CERC Tariff Regulations 2024 for NLC Tamilnadu Power Limited (NTPL), 2 x 500 MW Coal based Thermal Power Plant.

The copy of the Petition has been shared with Respondents through mail as per the CERC (Conduct of Business) Regulations, 2023.

NTPL has already remitted the filing fee, the details of which is submitted in Payment Form I in accordance with Payment of Fee Regulation

The above may please be taken on record.

Yours faithfully,
for NLC TAMILNADU POWER LIMITED

Chief Financial Officer

Encl: As above

RAJINDER KUMAR SINGH
CHIEF FINANCIAL OFFICER
NLC Tamil Nadu Power Limited
Harbour Estate Tuticorin - 628 004

BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

PETITION NO.____/ GT/ 2024

IN THE MATTER OF: *Petition Under Section 62 and 79 (1) (a) of the Electricity Act, 2003 read with Chapter-3, Regulation 9(2) and 10(1) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for determination of tariff for NLC Tamilnadu Power Limited (NTPL) (2 x 500 MW) for the period from 01.04.2024 to 31.03.2029*

AND

IN THE MATTER OF: -

NLC Tamilnadu Power Limited ...Petitioner

Versus

Tamil Nadu Power Distribution Corporation Limited & Ors. ...Respondents

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Filed By

Petitioner

Place: TUTICORIN

Date: 28-11-2024

BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

PETITION NO.____/ GT/ 2024

IN THE MATTER OF: *Petition Under Section 62 and 79 (1) (a) of the Electricity Act, 2003 read with Chapter-3, Regulation 9 and 10 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulation 2024 for determination of tariff for NLC Tamilnadu Power Limited (NTPL) (2 x 500 MW) for the period from 01.04.2024 to 31.03.2029*

AND

IN THE MATTER OF:-

NLC Tamilnadu Power Limited ...Petitioner

Versus

Tamil Nadu Power Distribution Corporation Limited & Ors. ...Respondents

MEMO OF PARTIES

IN THE MATTER OF:-

NLC Tamilnadu Power Limited,
135, EVR Periyar High Road, Kilpauk,
Chennai-600010. .....Petitioner

Versus

1. Tamil Nadu Power Distribution Corporation Limited
   Through its Chief Financial Controller/Regulatory
   NPKRR Maaligai, 144, Anna Salai,
   Chennai – 600002.
2. The Chief Engineer (Commercial),
   APPCC, Vidyut Soudha,
   Gunadala, Eluru Road, Vijayawada, Andhra Pradesh – 520 004.

3. The Managing Director,
   Southern Power Distribution Company of A.P. Ltd. (APSPDCL)
   D.NO:19-13-65/A
   Srinivasapuram, Tiruchanoor Road
   Tirupathi (AP)-517501.
4. The Managing Director,
   Eastern Power Distribution Company of A.P. Ltd. (APEPDCL)
   P&TColony, Seetammadhara, Vishakapatnam (AP)-503013
5. The Managing Director,
   Central Power Distribution Company of A.P. Ltd. (APCPDCL)
   2,54-16-5, ITI Road,
   Vijayawada, Andhra Pradesh – 520 008
6. The Executive Director (Commercial),
   TSPCC,
   Room No. 455, A Block,
   Vidyuth Soudha,
   Khairatabad, Hyderabad - 500082.
7. The Managing Director,
   Northern Power Distribution Company of Telangana Ltd. (TS NPDCL)
   H.No. 1 -1-504, Opp. NIT petrol Pump,
   Chaityanayapuri colony, Hanmkonda,
   Warangal (Telangana) - 506 001.
8. The Managing Director,
   Southern Power Distribution Company of Telangana Ltd. (TS SPDCL)
   2nd Floor, H.No.6-1-50, Mint Compound,
   Hyderabad-500063.
9. Power Company of Karnataka Ltd, (PCKL)
   Through its Director (Commercial)
   KPTCL Complex, Kaveri Bhavan,
   Bangalore – 560009.
10. Bangalore Electricity Supply Company Ltd (BESCOM),
    Through its Managing Director,
    Krishna Rajendra Circle,

Bangalore - 560 001.

11. Mangalore Electricity Supply Company Limited (MESCOM),
    Through its Managing Director,
    Corporate Office, MESCOM Bhavana,
    Bejai, Kavoor Cross Road,
    Mangalore 575 004.
12. Chamundeshwari Electricity Supply Corporation Ltd. (CESC), Mysore
    Through its Managing Director,
    Corporate Office No CA 29,
    Vijayanagar 2nd Stage, Hinakal, Mysore -570017
13. Gulbarga Electricity Supply Company Ltd. (GESCOM)
    Through its Managing Director
    Station Main Road, Gulbarga, Gulbarga -585 102
    Karnataka.
14. Hubli Electricity Supply Company Ltd. (HESCOM)
    Through its Managing Director
    P.B. Road, Navanagar, Hubli - 580 025.
15. Kerala State Electricity Board Ltd,
    Through its Chief Engineer (Commercial & Tariff)
    Vaidyuthi Bhavanam, Pattom,
    Thiruvananthapuram-695004.
16. Puducherry Electricity Department,
    Through its Superintending Engineer I (HOD),
    137, NSC Bose Salai,
    Puducherry – 605 001.

.....Respondents

FILED BY:

Petitioner

Place: Tuticorin

Date: 28-11-2024

RAJINDER KUMAR SINGH
CHIEF FINANCIAL OFFICER
NLC Tamil Nadu Power Limited
Harbour Estate, Tuticorin - 628 004

भारतीय गैर न्यायिक

एक सौ रुपये Rs. 100

रु. 100 ONE HUNDRED RUPEES

सत्यमेव जयते

भारत INDIA

INDIA NON JUDICIAL

தமிழ்நாடு तमिलनाडु TAMILNADU

CEO
NTPL

D. Thangamani
EY 174945

D. தங்கமணி (S.V.)
L. No : 3/2015, ஏரல்
தூத்துக்குடி மாவட்டம்
நியமனம்: 27 NOV 2024

BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

IN THE MATTER OF: *Petition Under Section 62 and 79 (1) (a) of the Electricity Act, 2003 read with Chapter-3, Regulation 9 & 10 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulation 2024 for determination of tariff for NLC Tamilnadu Power Limited (NTPL) (2 x 500 MW) for the period from 01.04.2024 to 31.03.2029*

AND

IN THE MATTER OF: -

NLC Tamilnadu Power Limited
135, EVR Periyar High Road, Kilpauk,
Chennai-600010. ...Petitioner

Versus

Tamil Nadu Power Distribution Corporation Limited ...Respondents

NOTARY
Reg.No: 6420
M. GANGA
THOOTHUKUDI DIST.
TAMILNADU
GOVT. OF INDIA

M. GANGA
ADVOCATE & NOTARY
GOVERNMENT OF INDIA
92-R, DEVARPURAM ROAD,
THOOTHUKUDI-628 003. TAMILNADU
Mob: 94431 33542

28 NOV 2024

RAJINDER KUMAR SINGH
CHIEF FINANCIAL OFFICER
NLC Tamil Nadu Power Limited
Harbour Estate, Tuticorin - 628 004

AFFIDAVIT VERIFYING THE PETITION

I, Rajinder Kumar Singh, S/o Shri. Amar Singh, aged about 50 years, resident of D-18, NTPL Township, Tuticorin – 628 004, do hereby solemnly affirm and state on oath as under:

1. That the deponent is the Authorized Signatory of the Petitioner company 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 Sections 62 read with 79(1) (a) of the Electricity Act, 2003, has been filed by my authorized representative under my instructions, and the contents of the same are true and correct to the best of my knowledge and belief.
3. That the contents of Paras 1 to 98 of the facts as mentioned in the Petition are true and correct based on my personal knowledge, belief, and records maintained in the office and the contents of Paras 1 to 98 of the Petition are believed to be true on the basis of the legal advice received.
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.

NOTARY Reg.No: 6420 M. GANGA THOOTHUKUDI DIST. TAMILNADU GOVT. OF INDIA

28.11.24

M. GANGA
ADVOCATE & NOTARY
GOVERNMENT OF INDIA
92-P, DEVARPURAM ROAD,
THOOTHUKUDI-628 003, TAMILNADU
Mob: 94431 33543

DEPONENT

RAJINDER KUMAR SINGH
CHIEF FINANCIAL OFFICER
NLC Tamil Nadu Power Limited
Harbour Estate, Tuticorin - 628 004

VERIFICATION

Verified at Tuticorin, on this day of 28th **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

RAJINDER KUMAR SINGH
CHIEF FINANCIAL OFFICER
NLC Tamil Nadu Power Limited
Harbour Estate, Tuticorin - 628 004

NOTARY
Reg.No: 6420
M. GANGA
THOOTHUKUDI DIST.
TAMILNADU
GOVT. OF INDIA

M. GANGA
ADVOCATE & NOTARY
GOVERNMENT OF INDIA
92-R, DEVARPURAM ROAD,
THOOTHUKUDI-628 003. TAMILNADU
Mob: 94431 33542

BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

PETITION NO. ____/GT/2024

IN THE MATTER OF : *Petition Under Section 62 and 79 (1) (a) of the Electricity Act, 2003 read with Chapter-3, Regulation 9 & 10 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulation 2024 for determination of tariff for NLC Tamilnadu Power Limited (NTPL) (2 x 500 MW) for the period from 01.04.2024 to 31.03.2029*

AND

IN THE MATTER OF:-

NLC Tamilnadu Power Limited ...Petitioner

Versus

Tamil Nadu Power Distribution Corporation Limited & Ors. ...Respondents

PETITION UNDER SECTION 62 AND 79 (1) (a) OF THE ELECTRICITY ACT, 2003 READ WITH CHAPTER-3, REGULATION 9 (2) AND 10 (1) OF CENTRAL ELECTRICITY REGULATORY COMMISSION (TERMS AND CONDITIONS OF TARIFF) REGULATIONS, 2024 FOR DETERMINATION OF TARIFF FOR NLC TAMILNADU POWER LIMITED (NTPL) (2 X 500 MW) FOR THE PERIOD FROM 01.04.2024 TO 31.03.2029

MOST RESPECTFULLY SHEWETH:

A. EXECUTIVE SUMMARY OF THE PETITION

(i) Brief background of the Petitioner

1. The Petitioner i.e., NLC Tamilnadu Power Limited ("**Petitioner**" / "**NTPL**") is a Central Public Sector Enterprise is a Generating Company within the meaning of

Section 2(28) of the Electricity Act, 2003 ("**Act**"). NTPL is Joint Venture Company of NLC India Limited ("**NLCIL**") and Tamil Nadu Power Distribution Corporation Limited ("**TNPDCL**") and is a subsidiary of NLCIL. The Joint Venture Company "NLC Tamilnadu Power Limited" (viz, NTPL) was incorporated on 18.11.2005 under the Companies Act, 1956 with its registered office at No.135, EVR Periyar High Road, Kilpauk, Chennai – 600010.

(ii) Brief background of the Respondents

2. The Respondents are various beneficiaries of the NTPL and are Companies existing under the provisions of the Companies Act, 2013, and they are all Distribution Licensees within their respective States and are sourcing power from the generating station of the Petitioner.

3. The power generated from NTPL is being supplied to the respondents herein mentioned below:

(a) Tamil Nadu Power Distribution Corporation Ltd (TNPDCL)
(b) Southern Power Distribution Company of A.P. Ltd. (APSPDCL)
(c) Eastern Power Distribution Company of A.P. Ltd. (APEPDCL)
(d) Central Power Distribution Company of A.P. Ltd. (APCPDCL)
(e) Northern Power Distribution Company of Telangana Ltd. (TS NPDCL)
(f) Southern Power Distribution Company of Telangana Ltd. (TS SPDCL)
(g) Bangalore Electricity Supply Company Ltd (BESCOM)
(h) Mangalore Electricity Supply Company Limited (MESCOM)
(i) Chamundeshwari Electricity Supply Corporation Ltd. (CESC)
(j) Gulbarga Electricity Supply Company Ltd. (GESCOM)
(k) Hubli Electricity Supply Company Ltd. (HESCOM)
(l) Kerala State Electricity Board Ltd (KSEB)
(m) Puducherry Electricity Department (PED)

(iii) Background of generating station/unit, transmission line /asset as the case may be

4. The present Petition has been filed under Section 62 and 79 (1) (a) of the Act read with Regulation 9(2) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 ("**Tariff Regulations, 2024**") for determination of tariff with respect to NTPL for the period from 01.04.2024 till 31.03.2029 on projection basis.

5. NTPL has an installed capacity of 1000 MW comprising of two Units of 500 MW each with coal fired boilers. It is humbly submitted that NTPL comprises of two units whereof the Unit-I was commissioned on 18.06.2015 and Unit II was commissioned on 29.08.2015.

6. Notably, Regulation 12 of the Tariff Regulations, 2024 states that the capital cost admitted as on 31.03.2024 is based on the truing up exercise and shall form the basis of the opening capital cost as on 01.04.2024 for the tariff determination for the period 2024-29.

7. Accordingly, NTPL being a Central generating station has approached this Hon'ble Commission seeking determination of tariff of NTPL for the period from 01.04.2024 to 31.03.2029.

(iv) Brief background of the important events relevant to the Petition

8. This Hon'ble Commission vide its order dated 11.07.2017 passed in Petition No. 135/GT/2015 had approved the capital cost and the annual fixed charges of NTPL from Commercial Operation Declaration ("**COD**") 2015 to 2019. Aggrieved by the said order, NTPL filed a Review Petition No. 38/RP/2017 seeking review on the following grounds:

(a) *To consider & allow the projected un-discharged liabilities to the tune of Rs.1069.31 crore in the tariff computation.*

(b) *To correct the error in the funding gap to tune of Rs.157.35 crore for Unit I and Rs.28.31 crore for the station and allow the same for tariff computation.*

(c) *To allow the grossing up MAT/Applicable tax from the financial year 2017-18 in the computation of ROE.*

(d) *To allow the additional O&M of Rs.2.208 lakh/MW for the additional facilities of NTPL.*

(e) *To consider the share application money of Rs.14.61 crores remitted by JV partner on 7.8.2015 as equity for tariff computation.*

(f) *To consider startup fuel cost of Rs.199.18 crores in full for tariff computation.*

(g) *To allow the IDC, IEDC, Normative interest and overheads in full considering the details mentioned in Review Petition No. 38/RP/2017*

9. On 26.12.2018, this Hon'ble Commission *vide* its order disposed of the Review Petition No. 38/RP/2017, rejecting the issues related to the undischarged liabilities to the tune of Rs. 1069.31 Crore, funding gap, Normative IDC, and delay and consequential IDC and IEDC on the ground that there is no error apparent on the face of the record. Furthermore, as regards issues (c) to (f) above, this Hon'ble Commission observed that the same will be considered at the time of the truing-up of the tariff.

10. On 01.04.2019, Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 ("**Tariff Regulations, 2019**") was notified by this Hon'ble Commission (which came into force from 01.04.2019). The said Regulations specify the terms & conditions and methodology of tariff determination for the period from 01.04.2019 to 31.03.2024 under Section 62 & 79 of the Act.

11. On 29.10.2019, NTPL filed a Truing up of tariff for the period 2015-19 *vide* Petition No. 528/GT/2020.

12. On 21.06.2024, this Hon'ble Commission *vide* its order determined the capital cost and the annual fixed charges for NTPL for the period 2015-19 after truing up the exercise. Notably, this Hon'ble Commission while carrying out the truing-up exercise had mentioned that the 'Issue of funding gap', 'Consideration of share application money as 'Equity', 'Normative IDC', Time Overrun' and 'consequential IDC and IEDC', will be subject to the outcome of Appeal No. 178/2019.

13. Aggrieved thereof, NTPL filed an Appeal No. 178/2019 before Hon'ble Appellate Tribunal for Electricity ("**Hon'ble APTEL**") with regard to 'Issue of funding gap', 'Consideration of share application money as 'Equity', 'Normative IDC', Time Overrun' and 'consequential IDC and IEDC'.

14. On 15.03.2024, this Hon'ble Commission notified the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 ("**Tariff Regulations, 2024**") (which came into force from 01.04.2024). The said Regulations specify the terms & conditions and methodology of tariff determination for the period from 01.04.2024 to 31.03.2029 under Section 62 & 79 of the Act.

15. On 21.06.2024, this Hon'ble Commission *vide* its order in Petition No. 528/GT/2020 determined the capital cost and the annual fixed charges for NTPL for the period 2019-24 after truing up exercise.

16. On 01.08.2024, this Hon'ble Commission *vide* its order in Petition No. 254/GT/2020 determined the tariff for the period 2019-24.

17. It is pertinent to note that NTPL has filed a Petition for truing up of tariff for period 2019-24 based on opening capital cost as on 31.03.2019 as admitted by the Commission as per Order dated 21.06.2024 passed in Petition No. 528/GT/2020

(2014-19 Truing up) and the actual capital expenditure incurred during the tariff period from 01.04.2019 to 31.03.2024.

18. At this juncture, it is relevant to take note of 9(2) and 10(1) of the Tariff Regulations, 2024 provides for filing of the Petition for determination of tariff for the period 2024-29 along with the truing up of tariff for the period 2019-24. It is further stated that the capital cost admitted as on 31.03.2024 (based on the truing up exercise) shall form the basis of the opening capital cost as on 01.04.2024 for the tariff determination for the period 2024-29. The same is reproduced below:

> *"**9. Application for determination of tariff***
> ...
> ***(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.***"
> ...
> *10. Determination of tariff*
>
> *(1) **The generating company** for a specific generating station or unit thereof or for an integrated mine or the transmission licensee for a transmission system or element thereof, as the case may be, **shall file a petition before the Commission as per Annexure-I to these regulations containing the details of underlying assumptions for the capital expenditure and additional capital expenditure incurred and projected to be incurred, wherever applicable.***
>
> ***[Emphasis Supplied]***

19. In terms of above provision, now at the end of control period 2019-24, NTPL is filing the present petition for determination of tariff for the period from 01.04.2024 to 31.03.2029 before the Hon'ble Commission considering the capital cost as on 31.03.2024 as submitted in the trued-up petition for the period from

01.04.2019 to 31.03.2024 and projected additional capital expenditure for the period 01.04.2024 to 31.03.2029.

(v) Summary of Claims

20. NTPL by way of the present Petition has made the following claims:

Claim Head	Amount (in Lakh Rs.)
Capital Cost as on 01.04.2024	**609850**
Projected Additional Capital Expenditure (from 2024-29)	**14952**

B. DETAILED PETITION

(i) Previous Orders issued having bearing on the present Petition

21. This Hon'ble Commission *vide* its order in Petition No. 254/GT/2020 has determined the tariff for the period 2019-24 which has substantial bearing upon the present determination for control period 2024-29.

(ii) Issue wise submission(s)

22. The detailed submissions for the ARR and Generation Tariff proposal for the Control Period 2024-29 have been made in the subsequent Sections of this Petition.

23. In light of the aforementioned facts, the present Petition has been filed seeking approval from this Hon'ble Commission on following issues/submissions:

Re. Capital Cost

24. Regulation 19 (3) of the Tariff Regulations, 2024 provides that the capital cost of an existing project shall include the capital cost admitted by this Hon'ble Commission prior to 01.04.2024 duly trued up. The relevant part is reproduced below:

"19. Capital Cost: (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.

....

(3) The Capital cost of an existing project shall include the following:

(a) Capital cost admitted by the Commission prior to 1.4.2024 duly trued up by excluding liability, if any, as on 1.4.2024;

(b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations..."

25. Accordingly, in terms of Regulation 19(3) of the Tariff Regulations, 2024 the capital cost of Rs. 609849.58 lakh as on 31.03.2024 has been considered as the opening capital cost as on 01.04.2024, for the purpose of determination of Tariff for the 2024-29 tariff period on projection basis. The projection of capital cost claimed for the tariff period 2024-29 is tabulated as below:

CAPITAL COST							
Particulars	**UOM**	***2023-24***	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
Opening Capital Cost	Rs. in lakhs	*608097.91*	6,09,850	6,11,738	6,15,548	6,29,248	6,29,248
Add : IDC	Rs. in lakhs	*0.00*	-	-	-	-	-
Add :Notional IDC Allowed		*0.00*	-	-	-	-	-
Gross Asset Value - Additions/lia (A)	Rs. in lakhs	*1847.71*	1,062	195	13,700	-	-
Deletion of Asset - (B)	Rs. in lakhs	*179.78*	5.21	-	-	-	-
ADD Liabilities Discharged	Rs. in lakhs	*83.74*	832	3,615	-	-	-
Closing Capital Cost	**Rs. in lakhs**	***609849.58***	**6,11,738**	**6,15,548**	**6,29,248**	**6,29,248**	**6,29,248**

26. Separately, the Petitioner has filed a Petition for truing up of its Tariff for the period FY 2019-24 and the same is pending before this Hon'ble Commission.

Re. Actual Capital Expenditure

27. NTPL has indicated year wise projected capital expenditure in **Form-9** of Tariff forms enclosed as **Annexure-I** in present Petition.

28. The additional capital expenditure projected during the period 2024-29 is as below:

						Rs in Lakhs
	2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**Total**
Projected Additional Capital Expenditure	1,057.14	195.00	13,699.80	-	-	14952

29. It is submitted to the Hon'ble Commission that NTPL has planned certain augmentation works in NTPL Ash Handling System for improving system efficiency. The same are being claimed as Additional Capital Expenditure and indicated in Form-9 of Tariff Forms. Detailed justification towards these expenditures is as below:

(a) Augmentation of Ash Handling System Proposed in the year 2026-27 (Rs. 13,700 Lacs for FY 2026-27)

i. NLCIL has been allotted Talabira coal mines with NTPL as End User Plant. However, subsequently, Coal India has stopped the supply of ECL coal to NTPL.

ii. Also, due to various guidelines issued by Government of India, procurement of import coal became very difficult. Thus, on account of stated reasons, ECL coal availability became nil & import coal availability is only intermittent.

iii. In fact, with the existing Fly ash evacuation and conveying system, the entire fly ash generated from the Boiler could not be handled and conveyed out to the fly ash silos from ESP hoppers, especially during Indian coal firing with an ash content of more than 50%.

iv. Furthermore, due to high ash content in indigenous coal, and stacking of ash in Unit-1 ESP led to Unit-1 C pass C3 and C4 first hoppers collapsed on 21.05.2023 and then Unit-1 was managed with three passes till stopping the Unit for Major Overhaul on 19.07.23.

v. Furthermore, in the absence of imported coal, when NTPL boilers are fuelled by MCL and Talabira coal, the ash conveying capacity is limited to 2250 tons per day for each unit, restricting the declared capacity to 300 MW. NTPL Partial loss due to ash evacuation issue for the FY 2023-24 is 1618.709 MU.

vi. Furthermore, this Hon'ble Commission in order dated 29.07.2016 passed in Petition No. 281/GT/2014 has allowed the expenditure incurred towards augmentation of ash handling system basis that such expenditure are continuous in nature and necessary for protecting the degradation of environment.

vii. Hence, in order to ensure continuous generation, it is proposed to augment the existing Ash handling system by considering 436 T of Talabira coal firing for 500 MW power generation at an estimate value of ₹ 137 Crores. In this regard, detailed technical justification is submitted as **ANNEXURE-II**.

30. With the above submission, it is requested to Hon'ble Commission to allow NTPL to recover the expenses projected to be incurred towards improvement of Plant's performance thus ensuring better Power availability. Thus, the present projected expenditure merits to be allowed to be allowed by this Hon'ble Commission in terms of **Regulation 26 (1) (i)** of the Tariff Regulations, 2024 as same is necessary for efficient operation of NTPL.

31. It is humbly submitted that for the purposes of determination of its tariff for the period FY 2024-29, the Petitioner is hereby submitting few instances of high value items that have been incorporated into NTPL. The year wise incorporation of such high value assets is set out as under:

(a) Installation of Roof Top Solar in Office buildings and plants (Rs. 174.49 Lacs for FY 2024-25)

i. In United Nations Climate Change Conference India pledged to enhance its climate action by reducing the emissions intensity of its GDP by 45% by 2030 from 2005 levels and achieving approximately 50% of its cumulative electric power capacity from non-fossil fuel sources by 2030. These commitments are part of India's broader strategy to combat climate change and promote sustainable development.

ii. In this regard, it is humbly submitted that the installation of rooftop solar panels is a key component of India's National Solar Mission, which aims to promote renewable energy and reduce dependence on fossil fuels. By harnessing solar energy, NTPL can not only decrease its operational costs but also contribute to the national target of increasing renewable energy capacity.

iii. In order to augment the above objective, one such contribution of NTPL is to install 300 KWp (AC) Roof top solar projects in office buildings of NTPL's thermal power plant. This will result in reduced auxiliary power consumption of NTPL thus contributing to COP commitment.

iv. The adoption of rooftop solar technology reflects NTPL's commitment to utilizing innovative solutions that enhance energy efficiency and sustainability in power generation.

v. It is pertinent to note that the Petitioner has undertaken these works in accordance with the policy framework of the Government of India which envisages achieving 175 GW of renewable energy by the end of the year 2022 and 500 GW by end of 2030 and as the measure of energy conservation.

vi. In this regard, it is submitted that this Hon'ble Commission *vide* order dated 13.07.2020 in Petition No. 270/GT/2019 titled "*M/s Torrent Power Ltd. vs MPPMCL & Ors.*" has approved the tariff for the period from 01.04.2014 to 31.03.2019 after truing-up exercise. Notably, this Hon'ble Commission in said order had allowed the installation of a Solar Power Rooftop System in the Petition.

vii. Therefore, such work being carried out in terms of the policy framework qualifies to be change in a law event and any additional expenditure incurred thereof merits to be allowed by this Hon'ble Commission in terms of **Regulation 26 (1) (b)** of the Tariff Regulations, 2024.

32. It is also apposite to state that reduction in energy consumption of the station would also benefit the beneficiaries. Further, it would also reduce greenhouse gases and thereby reduce emissions.

33. Therefore, this Hon'ble Commission may allow the expenditure incurred towards the above work in order to achieve the scheme of promoting usage of renewable energy as envisaged under the Act and in terms of Section 61 (d) of the Act i.e., to protect the interest of the consumers.

(b) Construction of protective shed inside TTPS plant area (Rs. 138.38 Lacs for FY 2024-25)

34. It is humbly submitted that Tuticorin Thermal Power Station ("**TTPS**") was nearby site to NTPL Power Plant. During September 2023. Accidentally, a spall of concrete from shell at top of NDCT 1 fell into TTPS main plant approach road. In this regard, TTPS has sent letter to NTPL to address the issue.

35. Thus, to solve the issue that such mishap does gets repeated, it was decided to construct a protective shed over the TTPS main approach road for a length of 50 m in alignment with NDCT 1 (where the debris fall).

36. Pertinently, during carrying out the repairing works of NDCT 1 also, the protective shed is of great importance in order to prevent falling of debris to ensure safety of working personnels and public. At this juncture, it is relevant to mention that this Hon'ble Commission in order dated 08.12.2023 passed in Petition No. 223/GT/2021 has allowed similar claim for construction of CGI sheet shed.

37. Furthermore, this Hon'ble Commission in order dated 23.10.2007 passed in Petition No. 34/2007 has allowed expenditure similar in nature on premise that such expenditure is in the interest of the beneficiaries. Likewise, NTPL implores

for same dispensation to NTPL's claim which is similar in nature and already allowed by this Hon'ble Commission in its previous orders.

38. Thus, the present expenditure projected to be incurred is imperative for safety of the plant and merits to be allowed by this Hon'ble Commission in terms of **Regulation 26 (1) (d)** of the Tariff Regulations, 2024. In this regard, supporting document is submitted as **ANNEXURE-II**

(c) Supply Installation, Commissioning of CCTV Surveillance (Rs. 124.41 Lacs for FY 2024-25)

39. It is humbly submitted that Central Industrial Security Force ("**CISF**") has requested for the installation of additional CCTV cameras at NTPL plant peripheral locations for strengthening of perimeter security of NTPL plant and also for effective monitoring of CCTV surveillance security system.

40. In addition, department for systematic improvement have suggested and recommended for the installation additional CCTV cameras at NTPL plant peripheral locations for strengthening of CCTV security system and also they have suggested for installation of CCTV camera system with latest features such as Night vision, Motion detection, video analytics, facial recognition and automatic number plate recognition system and also suggested to keep CCTV video recording back up for a minimum period of 3 months.

41. In view of the above, NTPL has proposed to install total 46 Nos. of CCTV cameras at identified locations for strengthening surveillance system at NTPL plant peripheral locations and also for effective monitoring and safety of the plant and machinery equipment's. It is pertinent to note that this Hon'ble Commission in order dated 04.09.2015 passed in Petition No. 237/GT/2014 has allowed

expenditure incurred towards installation of CCTV cameras on premise that same was necessary for successful and efficient operation of plant.

42. Furthermore, this Hon'ble Commission in order dated 14.01.2024 passed in Petition No. 412/GT/2020 has allowed expenditure incurred towards installation of CCTV on premise that same was necessary for safety and security of the generating station. Therefore, the claim of the Petitioner being similar in nature merits to be allowed by this Hon'ble Commission. Needless to state that allowing the claim of NTPL will be in line with maintain regulatory and judicial certainty.

43. Thus, the present expenditure projected to be incurred is imperative for safety of the plant and merits to be allowed by this Hon'ble Commission in terms of **Regulation 26 (1) (d)** of the Tariff Regulations, 2024. In this regard, supporting document is submitted as **ANNEXURE-II**

Re. Debt Equity Ratio

44. The Regulation 18 of Tariff Regulations, 2024 which provides for computation of Debt-Equity ratio states as follows:

> *18. Debt-Equity Ratio: (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan: Provided that:*
> *i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:*
> *ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:*
> *iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.*
> *...*
> *(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2024, the debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2024 shall be considered:"*

45. NTPL has considered the financing of Additional Capitalization at Normative Debt: Equity ratio of 70:30 for the control period 2024-29. The same is indicated in **Form-I** of the **Appendix-I**. For ease of reference, the computation of Additional Capitalization at Normative Debt: Equity ratio of 70:30 is tabulated hereunder:

DEBT EQUITY RATIO							
Particulars	**UOM**	***2023-24***	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
Average Capital Cost	Rs. in lakhs	*608973.74*	**6,10,794**	**6,13,643**	**6,22,398**	**6,29,248**	**6,29,248**
Average Normative Debt	Rs. in lakhs	*426281.62*	4,27,556	4,29,550	4,35,679	4,40,474	4,40,474
Average Normative Equity	**Rs. in lakhs**	***182692.12***	1,83,238	1,84,093	1,86,719	1,88,774	1,88,774

Re. Return on Equity

46. Regulation 30 of Tariff Regulations, 2024 provides that the computation of the Return on Equity is done by grossing up the base rate (i.e., 15.5%) with the effective tax rate applicable to NTPL. Notably, provisional tax rate for 2024-25 was arrived after adjusting MAT credit available as on 31.03.2024. Further, tax rate as applicable under Section 115BAA is considered provisionally for 2025-26 to 2028-29. The Regulation is reproduced as below:

> *"30. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.*
>
> *(2) Return on equity shall be computed at the base rate of 15.50 % for thermal generating stations transmission system including communication system and run of river hydro generating station and at the base rate of 16.50 % for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:*
>
> *Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law shall be computed at the weighted average rate of interest*

on actual loan portfolio of the generating station or the transmission system; Provided further that:

(i) In case of a new project the rate of return on equity shall be reduced by 1.00 % for such period as may be decided by the Commission if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO) data telemetry communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;

(ii) in case of existing generating station as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC rate of return on equity shall be reduced by 1.00 % for the period for which the deficiency continues;

(iii) in case of a thermal generating station with effect from 1.4.2020: a) (a) rate of return on equity shall be reduced by 0.25 % in case of failure to achieve the ramp rate of 1% per minute; (b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute subject to ceiling of additional rate of return on equity of 1.00%: Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.

"31. Tax on Return on Equity:

***(1)** The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e., income from business other than business of generation or transmission as the case may be) shall be excluded for the calculation of effective tax rate.*

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below: Rate of pre-tax return on equity = Base rate / (1-t) Where "t" is the effective tax rate in accordance with Clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of

non-generation or non-transmission business as the case may be and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT) "t" shall be considered as MAT rate including surcharge and cess. "

47. In terms of above provision, NTPL has computed the Return on Equity based on the Regulation 30 and 31 of Tariff Regulations, 2024. The Return on Equity for the capital infused under original scope of work and the return on equity for the capital infused beyond the original scope for the period from 2024-29 is indicated in **Form-1 (II)** of the **Appendix-I**. For ease of reference, the computation of Return on Equity is tabulated as below:

RETURN ON EQUITY with Normal Rate							
Particulars	**UOM**	***2023-24***	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
Opening Normative Equity	Rs. in lakhs	*182207.59*	182550	182999	184142	184142	184142
Addl. in Equity due to Add Cap	Rs. in lakhs	*371.44*	201	59	0	0	0
Reduction of Equity due to Deletion	Rs. in lakhs	*53.93*	2	0	0	0	0
Addl. in Equity due to Liability discharge	Rs. in lakhs	*25.12*	249	1085	0	0	0
Closing Normative Equity	Rs. in lakhs	*182550.22*	**182999**	**184142**	**184142**	**184142**	**184142**
Average Normative Equity	Rs. in lakhs	*182378.90*	182775	183571	184142	184142	184142
Rate of Return on Equity	%	*15.50%*	15.50%	15.50%	15.50%	15.50%	15.50%
Effective Tax Rate	%	*17.47%*	17.472%	17.47%	17.47%	17.47%	17.47%
Effective Rate of Return on Equity	%	*18.78%*	18.78%	18.78%	18.78%	18.78%	18.78%
Return on Equity for the period	Rs. in lakhs	*34254.41*	34,328.74	34,478.25	34,585.59	34,585.59	34,585.59

Return on Equity (Annualised)	**Rs. in lakhs**	***34254.41***	**34,328.74**	**34,478.25**	**34,585.59**	**34,585.59**	**34,585.59**

48. Furthermore, Return on equity for the additional capital expenditure which was beyond original scope has been computed basis the weightage average rate of interest on loan for NTPL as a whole for year 2023-24. The computation of same is reproduced hereunder:

RETURN ON EQUITY with WAROI							
Particulars	**UOM**	***2023-24***	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
Opening Normative Equity	Rs. in lakhs	*221.78*	404.66	522.31	522.31	4632.25	4632.25
Add.Cap	Rs. in lakhs	*182.88*	117.66	0.00	4109.94	0.00	0.00
Closing Normative Equity	Rs. in lakhs	*404.66*	522.31	522.31	4632.25	4632.25	4632.25
Average Normative Equity	Rs. in lakhs	*313.22*	463.49	522.31	2577.28	4632.25	4632.25
Rate of Return on Equity	%	*8.67%*	12.15%	12.15%	12.15%	12.15%	12.15%
EffectiveTax Rate	%	*17.47%*	17.47%	17.47%	17.47%	17.47%	17.47%
Effective Rate of Return on Equity	%	*10.50%*	14.70%	14.70%	14.70%	14.70%	14.70%
Return on Equity for the period	Rs. in lakhs	*32.89*	68.13	76.78	378.86	680.94	680.94
Return on Equity (Annualised)	**Rs. in lakhs**	***32.89***	**68.13**	**76.78**	**378.86**	**680.94**	**680.94**

Re. Interest on Loan Capital

49. NTPL had taken various long-term and short-term loans to finance the capital expenditure and additional capital expenditure. The Regulation 32 of Tariff Regulations, 2024 which provides for computation of Interest on Loan states as follows:

"32. Interest on loan capital: (1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered gross normative loans for the calculation of interest on loans.

(2) The normative loan outstanding as on 1.4.2024 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2024 from the gross normative loan.

(3) The repayment for each of the years of the tariff period 2024-29 shall be deemed to be equal to the depreciation allowed for the corresponding year or period. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis, and the adjustment should not exceed cumulative depreciation recovered up to the date of de-capitalisation of such asset.

(4) Notwithstanding any moratorium period availed of by the generating company or the transmission licensee, as the case may be, the repayment of the loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio or allocated loan portfolio;

Provided that if there is no actual loan outstanding for a particular year but the normative loan is still outstanding, the last available weighted average rate of interest of the loan portfolio for the project shall be considered;

Provided further that if the generating station or the transmission system, as the case may be, does not have any actual loan, then the weighted average rate of interest of the loan portfolio of the generating company or the transmission licensee as a whole shall be considered.

Provided that the rate of interest on the loan for the installation of the emission control system commissioned subsequent to date of commercial operation of the generating station or unit thereof, shall be the weighted average rate of interest of the actual loan portfolio of the emission control system, and in the absence of the actual loan portfolio, the weighted average

rate of interest of the generating company as a whole shall be considered, subject to a ceiling of 14%;

Provided further that if the generating company or the transmission licensee, as the case may be, does not have any actual loan, then the rate of interest for a loan shall be considered as 1-year MCLR of the State Bank of India as applicable as on April 01, of the relevant financial year.

(6) The interest on the loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing."

50. NTPL has considered the Interest on Loan as per the rate for FY 2023-24 for the period 2024-29. In this regard, the working out of Interest on Loan has been indicated in the **Form-N** attached at **Annexure-I.** For ease of reference, the computation of Interest on Loan is tabulated hereunder:

INTEREST ON LOAN							
Particulars	**UOM**	***2023-24***	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
Gross Outstanding Notional Loan	Rs. in lakhs	*425668.54*	4,26,894.70	4,28,216.81	4,30,883.88	4,40,473.74	4,40,473.74
Cumulative Repayments of Loan up to Previous Year	Rs. in lakhs	*233206.67*	2,65,040.59	2,96,997.07	3,29,102.63	3,61,666.24	3,94,588.24
Net Notional Loan - Opening	Rs. in lakhs	*192461.86*	1,61,854.11	1,31,219.74	1,01,781.26	78,807.50	45,885.51
Addn in Loan due to Add Cap	Rs. in lakhs	*1226.17*	743.65	136.50	9,589.86	-	-
Reduction of Loan due to Deletion	Rs. in lakhs	*0.00*	3.65	-	-	-	-
Addn in Loan due to Liability discharge	Rs. in lakhs	*0.00*	582.10	2,530.58	-	-	-

Less: Repayments during the year Corresponding to depreciation	Rs. in lakhs	*31833.92*	31,956.48	32,105.56	32,563.61	32,922.00	32,922.00
Net Notional Loan - Closing	Rs. in lakhs	*161854.11*	1,31,219.74	1,01,781.26	78,807.50	45,885.51	12,963.51
Average Net Notional Loan	Rs. in lakhs	*177157.99*	1,46,536.92	1,16,500.50	90,294.38	62,346.51	29,424.51
Weighted Average Rate of Interest	%	*8.67%*	8.67%	8.67%	8.67%	8.67%	8.67%
Interest on Loan for the period	Rs. in lakhs	*15364.87*	12,709.11	10,104.06	7,831.21	5,407.30	2,551.98
Interest on Loan Annualised	**Rs. in lakhs**	***15364.87***	**12709.11**	**10104.06**	**7831.21**	**5407.30**	**2551.98**

51. Furthermore, the gross normative loan corresponding to 70% of the capital cost have been computed accordingly:

DEPRECIATION							
Particulars	**UOM**	***2023-24***	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
Average Capital Cost	Rs. in lakhs	*608973.74*	6,10,793.94	6,13,643.35	6,22,398.31	6,29,248.21	6,29,248.21
Less: Land Value	Rs. in lakhs	*3395.62*	3,395.62	3,395.62	3,395.62	3,395.62	3,395.62
Depreciable Value @90%	Rs. in lakhs	*545020.31*	5,46,658.48	5,49,222.96	5,57,102.42	5,63,267.33	5,63,267.33
Cumulative Dep upto Prev.year	Rs. in lakhs	*233206.67*	2,65,040.59	2,96,993.28	3,29,098.84	3,61,662.45	3,94,584.45
Balance Depreciable value	Rs. in lakhs	*311813.64*	2,81,617.89	2,52,229.68	2,28,003.58	2,01,604.88	1,68,682.88
No of Completed years at the beginning of the year	years	*7.59*	8.587	9.587	10.587	11.587	12.587
Balance Useful Life	years	*17.41*	16.41	15.41	14.41	13.41	12.41
WAROD	%	*5.23%*	5.23%	5.23%	5.23%	5.23%	5.23%
Depreciation for the period	**Rs. in lakhs**	***31861.24***	**31,956.48**	**32,105.56**	**32,563.61**	**32,922.00**	**32,922.00**

Depreciation (Annualised)	**Rs. in lakhs**	***31861.24***	**31,956.48**	**32,105.56**	**32,563.61**	**32,922.00**	**32,922.00**
Cumulative Dep at the year End	Rs. in lakhs	*265067.92*	2,96,997.07	3,29,098.84	3,61,662.45	3,94,584.45	4,27,506.44
Less:Cumulative Dep due to Decapitalisation	Rs. in lakhs	*27.32*	3.79	-	-	-	-
Cumulative Depreciation after adjustment due to decapitalization	**Rs. in lakhs**	***265040.59***	**2,96,993.28**	**3,29,098.84**	**3,61,662.45**	**3,94,584.45**	**4,27,506.44**

Re. Depreciation

52. Regulation 33(5) of Tariff Regulations, 2024 stipulates that depreciation of existing Projects shall be calculated annually based on Straight Line Method. Furthermore, after a period of 12 from the COD of station (herein NTPL) the depreciation shall be spread over the balance useful life of the asset. The Regulation 33(5) of Tariff Regulations, 2024 is extracted hereunder:

> *"Depreciation for Existing Projects shall be calculated annually based on Straight Line Method and at rates specified* ***in Appendix-I*** *to these regulations for the assets of the generating station and transmission system. Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets."*

53. In terms of Regulation 33 of the Tariff Regulations 2024, the depreciation value is spread over the balance useful life. The computation of same has been indicated in the **Form-12** attached at **Annexure-I.**

Re. Interest on Working Capital

54. Regulation 34 of Tariff Regulations 2024 provides the methodology of Interest on Working Capital along with the rate of interest to be considered for the purpose of computation of Interest on Working Capital in the FY 2024-29.

55. Furthermore, the rate considered for computation of interest on working capital is Reference Rate of Interest as on 1.4.2024. Additionally, the cost of fuel is arrived at based on the landed fuel cost of the generating station and gross calorific value of the fuel as per actual weighted average for the preceding financial year in case of each financial year for which tariff is to be determined. The Regulation 34 of Tariff Regulations, 2024 is extracted hereunder:

> *"34. Interest on Working Capital: (1) The working capital shall cover:*
> *(a) For Coal-based/lignite-fired thermal generating stations:*
> *(i) Cost of coal or lignite and limestone towards stock, if applicable, for 10 days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;*
> *(ii) Limestone towards stock for 15 days corresponding to the normative annual plant availability*
> *(iii) Advance payment for 30 days towards cost of coal or lignite and limestone for generation corresponding to the normative annual plant availability factor;*
> *(iv) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;*
> *(v) Maintenance spares @ 20% of operation and maintenance expenses including water charges and security expenses;*
> *(vi) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on the normative annual plant availability factor; and*
> *(vi) Operation and maintenance expenses, including water charges and*
> *...*
> *(2) **The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 59 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined:***

Provided that in case of new generating station, the cost of fuel for the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 59 of these regulations) and gross calorific value of the fuel as per actual weighted average for three months, as used for infirm power, preceding date of commercial operation for which tariff is to be determined.

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2024 or as on 1st April of the year during the tariff period 2024-29 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

Provided that in case of truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2024-29."

56. In terms of above, the computation of Interest on Working Capital is indicated in the **Form-O** attached at **Annexure-I**. For ease of reference, the computation of Interest on Working Capital is tabulated hereunder:

INTEREST ON WORKING CAPITAL							
Particulars	**UOM**	***2023-24***	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
Cost of Coal towards Stock 20 Days	Rs. in lakhs	*16788.94*	13,291.67	13,291.67	13,291.67	13,291.67	13,291.67
Cost of Coal towards Generation 30 Days	Rs. in lakhs	*25183.41*	19,937.51	19,937.51	19,937.51	19,937.51	19,937.51
Cost of Lime Stone 45 Days	Rs. in lakhs	*0.00*	-	-	-	-	-
Cost of Secondary Fuel Oil	Rs. in lakhs	*351.19*	359.08	359.08	359.08	360.06	359.08
Maintenance Spares	Rs. in lakhs	*5965.21*	5,901.46	6,210.83	6,535.37	6,877.14	7,236.20
Receivables-Energy	Rs. in lakhs	*40649.04*	31,909.68	31,909.68	31,909.68	31,909.68	31,909.68
Receivables- AFC	Rs. in lakhs	*15263.34*	14,684.34	14,596.91	14,630.95	14,590.77	14,506.26
Receivables-Total	**Rs. in lakhs**	***55912.38***	**46,594.02**	**46,506.59**	**46,540.63**	**46,500.45**	**46,415.94**
O&M expenses	Rs. in lakhs	*2485.50*	2,458.94	2,587.85	2,723.07	2,865.48	3,015.08
Total Working Capital	Rs. in lakhs	*106686.63*	**88,542.68**	**88,893.53**	**89,387.33**	**89,832.31**	**90,255.48**
Rate of Interest on Working Capital	%	*12.00*	11.90	11.90	11.90	11.90	11.90

Interest on Working Capital	Rs. in lakhs	*12802.40*	10,536.58	10,578.33	10,637.09	10,690.04	10,740.40
Interest on Working Capital for the period	Rs. in lakhs	*12802.40*	10,536.58	10,578.33	10,637.09	10,690.04	10,740.40
Interest on Working Capital (Annualised)	**Rs. in lakhs**	***12802.40***	**10,536.58**	**10,578.33**	**10,637.09**	**10,690.04**	**10,740.40**

Re. O&M Expenses

57. It is humbly submitted that Tariff Regulations, 2024 provides for normative operation and maintenance expenses. The norms for NTPL are specified under Regulation 36(1) and same is tabled below:

					in Lakhs/MW
	2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**
Normative O&M Expenses	27.17	28.60	30.10	31.68	33.34

58. It is humbly submitted that the Petitioner has adopted the above norms as stipulated in clause 36(1)(1) of the Tariff Regulations, 2024 for the tariff computation of NTPS in the tariff period of FY 2024-29. The same is given in **Form 3 of Appendix-I.**

Re. Additional O&M Expenses

I. Desalination Plant

59. NTPL being coastal generating station has special features viz., Desalination Plant required for smooth and efficient operation of the generating station. As per this Hon'ble Commission's direction, NTPL has submitted actual expenditure incurred for desalination plant in Truing up Petition 2019-24. Same is as follows.

					in Lakhs
	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Actual Additional O&M expenses for desalination plant	1,010.75	480.49	871.48	1,289.44	1,781.27

60. Notably, during the year 2023-24, a special type of membrane called SWRO membranes in Desalination plant (854 Nos) were purchased for an amount of Rs. 52167447/- which has life span of 6-8 years. Hence, the additional O&M towards desalination plant in the particular year was higher. The same was justified with supporting documents in Truing up Petition 2029-24 filed before this Hon'ble commission.

61. Therefore, considering above, NTPL has projected the O&M expenses for the tariff period 2024-29 based on the actual expenditure incurred during 2023-24 excluding expenditure towards SWRO membrane and with an escalation of 5% each year. The detail of claim is as under:

					in Lakhs
	2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**
Projected Additional O&M expenses for desalination plant	1,322.57	1,388.70	1,458.13	1,531.04	1,607.59

Re. Water charges

62. Regulation 36(1)(6) of the Tariff Regulations, 2024 provides that this Hon'ble Commission, after prudence check, shall allow the water charges based on water consumption depending upon type of plant and type of cooling water system or water agreement with state govt./utilities, and the norms specified the MoEF&CC. The relevant extracts are reproduced hereunder:

> *"36. **Operation and Maintenance Expenses:***
> ***(1) Thermal Generating Station:** Normative Operation and Maintenance expenses of thermal generating stations shall be as follows:*
> ....

*(6) The **Water Charges**, Security Expenses, Ash Transportation Expenses and Capital Spares for thermal generating stations shall be allowed separately after prudence check:*

Provided that water charges shall be allowed based on water consumption depending upon type of plant and type of cooling water system or water agreement with state govt./utilities, and the norms specified by the Ministry of Environment, Forest and Climate Change subject to prudence check. The details regarding the same shall be furnished along with the petition;..."

[Emphasis supplied]

63. It is submitted that NTPL has adopted norms for the computation of water charges as stipulated in clause 36(1)(6) of the Regulations 2024. Furthermore, the Water Charges, Security expenses and capital spares for thermal generating stations shall be allowed separately after prudence check.

64. It is submitted that NTPL may be permitted to claim the water charges which consists of consent fee payable to Tamilnadu Pollution Control Board under the Water Act from the beneficiaries based on the projected figures taking the actual water charges for FY 2023-24 as reference.

65. However, actual expense to be incurred towards water charges will be claimed at the time of Truing up for the period 2024-29. Details for water expenditures projected for the period 2024-29 has been indicated in **Form-19** attached at **Annexure-I.** For ease of reference, the details for water expenditures projected for the period 2024-29 is furnished below:

in Lakhs

	2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**
Projected Water Charges	28.22	29.63	31.11	32.67	34.30

Re. Security Charges

66. As stated above, Regulation 36(1)(6) of the Tariff Regulations, 2024 also provides for the allowance of the security expenses after the prudence check by this Hon'ble Commission.

67. The Central Industrial Security Force ("**CISF**") is a premier multi-skilled security agency of the country, mandated to provide security to Industrial zones like the Thermal Power Station of NTPL. The details of security expenses have been furnished by NTPL, in terms of clause 35 (1) (6) of the Tariff Regulations, 2024. Hence, NTPL may be allowed to recover the actuals from the beneficiaries.

68. It is humbly submitted that since NTPL is located in the high alert security zone. Therefore, the deployment of adequate security mechanisms is necessary:

(a) to take appropriate security arrangements at hydro generating stations, dams, etc.; and

(b) to strengthen the physical security of the various generating stations and tighten the personal security.

69. Notably, the measures (as noted above) are necessary against any untoward situation arising due to the terrorist attack or theft that may cause loss of property and prolonged interruption of the generation. The same can result in hampering the reliable power service to the beneficiaries, causing great loss to the nation.

70. The details of Security expenses for the control period 2019-24 on true up basis is furnished below:

71. The details of Security expenses for the control period 2024-29 on projection basis is furnished below:

					(Rs in Lakh)
Security Expenses	2024-25	2025-26	2026-27	2027-28	2028-29
	987	1,036	1,088	1,142	1,199

72. It is humbly submitted that the actual expense to be incurred towards security will be claimed at the time of Truing up for the period 2024-29.

Re Capital Spares

73. It is submitted that details of capital spares consumed for the period 2024-29 will be submitted at the time of truing up and the same will be included in the Tariff.

74. With this, the total O&M expenses including water charges and security expenses for the tariff period have been tabulated below:

OPERATION & MAINTENANCE EXPENSES							
Particulars	**UOM**	***2023-24***	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
Normative Operation & Maintenance Expenses	Rs. in Lakhs/ MW	*25.84*	27.17	28.60	30.10	31.68	33.34
Normative Operation & Maintenance Expenses	Rs. in lakhs	*25840.00*	27,170.00	28,600.00	30,100.00	31,680.00	33,340.00
Additional O&M Expenses for Desalination Plant	Rs. in lakhs	*1781.27*	1,322.57	1,388.70	1,458.13	1,531.04	1,607.59
Water Charges	Rs. in lakhs	*26.87*	28.22	29.63	31.11	32.67	34.30
Security Expenses	Rs. in lakhs	*939.54*	987	1,036	1,088	1,142	1,199
Capital Spares	Rs. in lakhs	*1238.36*	-	-	-	-	-
Total Operation & Maintenance Expenses for the period	Rs. in lakhs	*29826.04*	29,507	31,054	32,677	34,386	36,181
Total Operation & Maintenance Expenses Annualised	**Rs. in lakhs**	***29826.04***	**29,507.30**	**31,054.17**	**32,676.87**	**34,385.72**	**36,181.00**

Re. Norms & Parameters adopted for the period 2024-29

75. NTPL for the computation of tariff has considered the normative parameters for computation and same is in accordance with the provisions of Tariff Regulations 2024. The normative parameters for the period 2024-29 is as under:

Base Rate of Return on Equity	%	15.50
Effective Tax Rate adopted in workings	%	Effective Tax rate – actual of FY 2023-24
Target Availability	%	85.00
Auxiliary Energy Consumption	%	5.25
CERC Approved Station Heat Rate	kCal/kWh	2347.60
Specific Fuel Oil Consumption	ml/kWh	0.5
Cost of Coal for working capital	in days	50
Stock of Main Secondary Fuel Oil for working capital	in Months	2.00
O&M expenses for 2024-29	Rs lakhs /MW	As per Norms
Maintenance Spares for WC	% of O&M	20.00
Receivables for working capital	in Days	45
Interest on WC	%	Reference Rate

Re. Normative Annual Plant Availability Factor

76. Regulation 70(A)(a) of the Tariff Regulations, 2024 provides for Normative Annual Plant Availability Factor and same is reproduced hereunder:

> *"85% for all thermal generating stations, except those covered under clauses (b), (c), (d) and (e);"*

77. Hence, in terms of above provision, the Normative Annual Plant Availability Factor of 85% has been adopted for NTPL for the period 2024-29 as specified in the Regulation.

Re. Gross Station Heat Rate

78. Regulation 70(C)(b) of the Tariff Regulations, 2024 provides for Gross Station Heat Rate and same is reproduced hereunder:

> *"Regulation 70(C)(b) specifies the methodology to calculate Normative Station heat rate of Thermal Station which is reproduced as below:*
> *"(b) Thermal Generating Stations achieving COD on or after 1.4.2009:*
> *(i) For Coal-based and lignite-fired Thermal Generating Stations:*
> *For 500 MW Sets and above: 1.045 X Design Heat Rate (kCal/kWh)*
> *Where the Design Heat Rate of a generating unit means the unit heat rate guaranteed by the supplier at conditions of 100% MCR, zero percent make up, design coal and design cooling water temperature/back pressure."*

79. Pertinently, NTPL's design Turbine Cycle heat rate is 1932 kCal/kWh and Boiler Efficiency is 85.90%. Accordingly, the design heat rate of the generating station is 2249.13 kCal/kWh (1932/0.859). Further, the fourth proviso to the above Regulation provides that where the boiler efficiency is lower than 86% for subbituminous Indian coal, the same shall be considered as 86%.

80. Thus, considering the boiler efficiency as 86%, the unit design heat rate works out to 2246.51 kCal/kWh. By multiplying the factor of 1.045, the Heat Rate Works out to be 2358.58 kCal/kWh (1.045 x 2246.51). Accordingly, NTPL has considered GSHR of 2347.60 kCal/kWh for the period 2024-29 in the petition

Re. Fuel Oil Consumption

81. Regulation 70(D)(a) of Tariff Regulation, 2024 provides for Secondary Fuel Oil Consumption (ml/kWhr), which reads as under:

> *"(a) For Coal-based generating stations: 0.50 ml/kWh"*

82. Hence, in terms of above provision, the Normative Secondary Fuel Consumption of 0.5ml/kWhr has been adopted for the period 2024-29.

Re. Auxiliary Power Consumption

83. Regulation 70(E)(a) (ii) of Tariff Regulations, 2024 provides as under:

(a) For Coal-based generating stations except at (b) below:

Sl.No	*Generating Station*	*With Natural Draft cooling tower or without cooling tower*
(i)	*200-300 MW series*	*8.50%*
(ii)	300/ 330/ 350/ 500 MW and above	
	Steam driven boiler feed pumps	*5.25%*
	Electrically driven boiler feed pumps	8.00%
(iii)	600 MW and above	
	Steam driven boiler feed pumps	5.25%
	Electrically driven boiler feed pumps	8.00%

84. In terms of above, it is evident that Regulation 70(E) (a) (ii) of the Tariff Regulations, 2024 provides for auxiliary power consumption of 5.25% for the coal-based plants with natural draft cooling towers.

85. Thus, considering 1% additional auxiliary power consumption due to special features like Desalination Plant, Shore Unloaders and Offshore Conveyors at NTPL, this hon'ble Commission allowed 6.25% for the period 2019-24 which is same as allowed during the period 2014-19 and directed petitioner to furnish the details of the actual APC and power consumed by all the additional features along with details of PLF for the period 2019-24 at the time of truing up tariff. Accordingly, the following actual details are furnished for the period 2019-24:

Year	Gross Generation (MU)	Actual Total APC (Station) (%)	Additional APC for special features (Desalination Plant, Shore Unloader & Offshore Conveyor) (%)	PLF (%)
2019-20	4844.400	7.172	0.666	55.150
2020-21	5290.578	7.380	0.560	60.395
2021-22	4182.457	7.875	0.620	47.745
2022-23	5929.992	6.848	0.632	67.694
2023-24	5462.335	7.217	0.803	62.185

86. At this juncture, it is humbly submitted that NTPL was initially using coal from Mahanadi Coalfields Limited (MCL) and Eastern Coalfields Limited (ECL) through Fuel supply agreement and also import coal for generation.

87. Meanwhile, in the year 2017 import coal procurement was stopped as per 'Made in India' policy of GoI. Later in the year 2021, as per the Nominated authority constituted under section 6 of Coal mines (Special Provision) Act 2015, Ministry of Coal, GoI allocated Talabira II & III OCP Coal Block to NLCIL and NTPL is the end user Plant (EUP).

88. Subsequently supply from MCL & ECL was stopped and presently NTPL is using LGCV Talabira coal and import coal for generation as per GoI direction. Presently, as NTPL is using only one type of LGCV domestic coal from Talabira, the requirement of coal is higher than previous years which in turn increases the handling of coal by shore unloaders and hence APC during the year 2023-24 is higher than previous years.

89. In the coming years also, NTPL will be handling LGCV coal from Talabira Mines and consequent APC by shore unloaders will be in same range as in 2023-24 and hence APC towards additional features will be >0.8%.

90. Hence, this Hon'ble Commission is requested to fix benchmark for APC for NTPL based on the actual additional APC during the year 2023-24 and the same may be allowed to claim for the period 2024-29 also on provisional basis for which actuals will be submitted at the time of truing up.

(iii) Final Claims made in the Petition:

Re. The Annual Fixed Cost calculated is tabled as below:

91. As a culmination of above claims and based on the details submitted in the foregoing paras, the summary of Annual Fixed Cost for the period 2024-29 is computed as below:

ANNUAL FIXED COST (Annualised)							
Particulars	**UOM**	***2023-24***	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
Depreciation	Rs. in lakhs	*31861.24*	31,956	32,106	32,564	32,922	32,922
Interest on Loan	Rs. in lakhs	*15364.87*	12,709	10,104	7,831	5,407	2,552
Return on Equity	Rs. in lakhs	*34287.29*	34,397	34,555	34,964	35,267	35,267
Interest on Working Capital	Rs. in lakhs	*12802.40*	10,537	10,578	10,637	10,690	10,740
Operation & Maintenance Expenses	Rs. in lakhs	*29826.04*	29,507	31,054	32,677	34,386	36,181
TOTAL ANNUAL FIXED COST	**Rs. in lakhs**	***124141.84***	**1,19,106**	**1,18,397**	**1,18,673**	**1,18,672**	**1,17,662**

Re. Expenditure on Public Notice:

92. In compliance with this Hon'ble Commission's procedure for making an application for tariff, NTPL is under a statutory obligation to issue public notice, which is to be published in English & Vernacular Language Newspapers in the beneficiary States.

93. Therefore, on account of above, an estimated expenditure of Rs 10 lakhs (approximately) towards publication is to be incurred by NTPL. It is kindly prayed that the said amount may kindly be allowed to NTPL.

C. LIMITATIONS

94. Notably, Regulation 13(2) of the Tariff Regulations, 2024 provides that 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 31.03.2024 (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 Tariff Regulations, 2019.

95. Therefore, the present Petition is being filed within the timelines prescribed under the Tariff Regulations issued by this Hon'ble Commission and hence, is within limitation.

96. NTPL is requesting Commission to permit to recover the application filing fee, publication fee and other associated fees, directly from the beneficiaries as stated in Regulation 94, in proportion of their allocation in the generating station.

97. NTPL craves leave for submission of additional information during the proceedings in the instant petition as directed by the Hon'ble Commission

D. PRAYERS

98. In the light of above narrated facts and submissions, NTPL prays that this Hon'ble Commission may be pleased to:

(a) Admit the present tariff petition for determination of tariff for NTPL (2x500 MW) for the period 01.04.2024 to 31.03.2029 based on the data provided in the present Petition; and

(b) Approve the Annual Fixed Charges claimed in the present Petition, and continue to bill the beneficiaries basis the tariff determined in the present Petition till the trued-up order for 2024-29 is issued by the Hon'ble Commission; and

(c) Allow NTPL to claim expenditure projected for augmentation of Ash Handling System for improvement of Plant Availability, as prayed for in the present Petition;

(d) Allow NTPL to recover water charges, security expenses, additional O&M towards desalination plant from the Beneficiaries as prayed for in the present Petition; and

(e) Allow NTPL to claim Additional APC towards Special features viz., Shore unloader, offshore conveyor system and desalination plant on provisional basis during the period 2024-29; and

(f) Allow NTPL to claim the actual cost of capital spares from the beneficiaries at the time of truing up;

(g) Allow NTPL to recover the filing fee, press notification fee and other miscellaneous Fee from the beneficiaries as prayed for in the present Petition;

(h) Pass such order(s) as deemed fit and appropriate by the Hon'ble Commission.

PETITIONER

RAJINDER KUMAR SINGH
CHIEF FINANCIAL OFFICER
NLC Tamil Nadu Power Limited
Harbour Estate, Tuticorin - 628 004

ANNEXURE I

MAIN TARIFF FORMS AND SUPPORTING FORMS

TARIFF FILING FORMS (THERMAL) FOR DETERMINATION OF TARIFF

Main Tariff Form PART-I

Annexure-I

Checklist of Main Tariff Forms and other information for tariff filing for NLCTamilnadu Power Limited (NTPL) 2 x 500 MW THERMAL POWER STATION

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- 4	Details of Foreign loans	NA
FORM- 4A	Details of Foreign Equity	NA
FORM-5	Abstract of Admitted Capital Cost for the existing Projects	√
FORM- 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-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 Lig & Oil	√
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	√

PART-I

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

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

Summary of Tariff

PART-I
FORM- 1

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

S. No.	Particulars	Unit	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	5	6	7	8	9	10
1.1	Depreciation	Rs Lakh	31,861.24	31,956.48	32,105.56	32,563.61	32,922.00	32,922.00
1.2	Interest on Loan	Rs Lakh	15,364.87	12,709.11	10,104.06	7,831.21	5,407.30	2,551.98
1.3	Return on Equity[1]	Rs Lakh	34,287.29	34,396.88	34,555.03	34,964.45	35,266.53	35,266.53
1.4	Interest on Working Capital	Rs Lakh	12,802.40	10,536.58	10,578.33	10,637.09	10,690.04	10,740.40
1.5	O&M Expenses	Rs Lakh	29,826.04	29,507.30	31,054.17	32,676.87	34,385.72	36,181.00
1.6	Special Allowance (If applicable)	Rs Lakh	-	-	-	-	-	-
1.7	Compensation Allowance (If applicable –	Rs. Lakh	-	-	-	-	-	-
	Total	Rs Lakh	**1,24,141.84**	1,19,106.35	1,18,397.14	**1,18,673.24**	**1,18,671.59**	**1,17,661.91**
2.1	Landed Fuel Cost (coal/gas/RLNG/ liquid) as per FSA approved by beneficiaries	Rs/Ton	*5,863.29*	4,558.69	4,558.69	4,558.69	4,558.69	4,558.69
	(%) of Fuel Quantity	(%)	*85.12*	91.28	91.28	91.28	91.28	91.28
2.2	Landed Fuel Cost Imported Coal as per FSA approved by beneficiaries							
	(%) of Fuel Quantity							
2.3	Landed Fuel Cost (coal/gas /RLNG/liquid) other than FSA	Rs/Ton						
	(%) of Fuel Quantity	(%)						
2.4	Landed Fuel Cost Imported Coal other than FSA.		14,946.671	7,885.048	7,885.048	7,885.048	7,885.048	7,885.048
	(%) of Fuel Quantity		14.88	8.72	8.72	8.72	8.72	8.72
2.5	Secondary fuel oil cost	Rs/Unit	*0.056*	0.05787	0.05787	0.05787	0.05787	0.05787
	Energy Charge Rate ex-bus (Paise/kWh) [2A, 2B, 2C, 2D]	Rs/Unit	*4.428*	3.47600	3.47600	3.47600	3.47600	3.47600

Petitioner

Note:
1. Details of calculations, considering equity as per regulation, to be furnished.
2A. If multi fuel is used simultaneously, give 2 in respect of every fuel individually.
2B. The rate of energy charge shall be computed for open cycle operation and combined cycle operation separately in case of gas/liquid fuel fired plants.
2C. The total energy charge shall be worked out based on ex-bus energy scheduled to be sent out.
2D. The Energy Charge rate for the month shall be based on fuel cost(s) and GCV(s) for the month as per Regulation 43.
2E. In case breakup is not available for 2.1 to 2.5, consolidated statement needs to be submitted.

PART-I

FORM-1(I)

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

Fig Rs in Lakhs

Statement showing claimed capital cost – (A+B)

S. No.	Particulars	*Existing 2023-24*	2024-25	2025-26	2026-27	2027-28	2028-29
1	2		3	4	5		7
1	Opening Capital Cost	*6,08,097.91*	6,09,849.58	6,11,738.30	6,15,548.41	6,29,248.21	6,29,248.21
2	Add: Addition during the year/period	*1,847.71*	1,062.36	195.00	13,699.80	-	-
3	Less: De-capitalisation during the year/period	*179.78*	5.21	-	-	-	-
4	Less: Reversal during the year / period		0	0	0	0	0
5	Add: Discharges during the year/ period	*83.74*	831.58	3,615.11	-	-	-
6	**Closing Capital Cost**	*6,09,849.58*	**6,11,738.30**	**6,15,548.41**	**6,29,248.21**	**6,29,248.21**	**6,29,248.21**
7	**Average Capital Cost**	*6,08,973.74*	**6,10,793.94**	**6,13,643.35**	**6,22,398.31**	**6,29,248.21**	6,29,248.21

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

S. No.	Particulars	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	2		3	4	5	6	7
1	Opening Capital Cost	*6,07,358.64*	*6,08,500.72*	*6,09,997.25*	*6,13,807.36*	*6,13,807.36*	*6,13,807.36*
2	Add: Addition during the year / period	*1,238.12*	*670.16*	*195.00*	-	-	-
3	Less: De-capitalisation during the year / period	*179.78*	*5.21*	-	-	-	-
4	Less: Reversal during the year / period	-	-	-	-	-	-
5	Add: Discharges during the year / period	*83.74*	*831.58*	*3,615.11*	-	-	-
6	**Closing Capital Cost**	*6,08,500.72*	**6,09,997.25**	6,13,807.36	6,13,807.36	6,13,807.36	6,13,807.36
7	**Average Capital Cost**	*6,07,929.68*	6,09,248.98	6,11,902.30	6,13,807.36	6,13,807.36	6,13,807.36

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

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	*739.27*	1,348.85	1,741.05	1,741.05	15,440.85	15,440.85
2	Add: Addition during the year / period	*609.59*	392.19	-	13,699.80	-	-
3	Less: De-capitalisation during the year / period	*0.00*	-	-	-	-	-
4	Less: Reversal during the year / period	*0.00*	-	-	-	-	-
5	Add: Discharges during the year / period	*0.00*	-	-	-	-	-
6	**Closing Capital Cost**	*1,348.85*	1,741.05	1,741.05	15,440.85	15,440.85	15,440.85
7	**Average Capital Cost**	*1,044.06*	**1,544.95**	**1,741.05**	**8,590.95**	**15,440.85**	**15,440.85**

(Petitioner)

PART-I
FORM-1(I)

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

Fig Rs in 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		7
1	Opening Gross Capital Cost	6,09,849.58	6,11,738.30	6,15,548.41	6,29,248.21	6,29,248.21
2	Add: Addition during the year/period	1,062.36	195.00	13,699.80	-	-
3	Less: De-capitalisation during the year/period	5.21	-	-	-	-
4	Less: Reversal during the year / period	-	-	-	-	-
5	Add: Discharges during the year/ period	831.58	3,615.11	-	-	-
6	**Closing Capital Cost**	6,11,738.30	6,15,548.41	6,29,248.21	6,29,248.21	6,29,248.21
7	**Average Capital Cost**	6,10,793.94	6,13,643.35	6,22,398.31	6,29,248.21	6,29,248.21
	Cumulative Depreciation upto Previous Year	2,65,040.59	2,96,993.28	3,29,098.84	3,61,662.45	3,94,584.45
	Opening Net Fixed Assets	3,44,808.98	3,14,745.01	2,86,449.57	2,67,585.76	2,34,663.76
	Add:Net Current Additions	1,888.72	3,810.11	13,699.80	-	-
	Less:Net Current Depreciation	31,956.48	32,105.56	32,563.61	32,922.00	32,922.00
	Closing Net fixed Assets	3,14,741.23	2,86,449.57	2,67,585.76	2,34,663.76	2,01,741.76
	Average Net Fixed Assets	3,29,775.10	3,00,597.29	2,77,017.66	2,51,124.76	2,18,202.76

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	6,08,500.72	6,09,997.25	6,13,807.36	6,13,807.36	6,13,807.36
2	Add: Addition during the year / period	670.16	195.00	-	-	-
3	Less: De-capitalisation during the year / period	5.21	-	-	-	-
4	Less: Reversal during the year / period	-	-	-	-	-
5	Add: Discharges during the year / period	831.58	3,615.11	-	-	-
6	**Closing Capital Cost**	6,09,997.25	6,13,807.36	6,13,807.36	6,13,807.36	6,13,807.36
7	**Average Capital Cost**	6,09,248.98	6,11,902.30	6,13,807.36	6,13,807.36	6,13,807.36
	Cumulative Depreciation upto Previous Year	2,64,893.54	2,96,755.14	3,28,769.61	3,60,525.36	3,92,639.50
	Opening Net Fixed Assets	3,44,355.44	3,15,147.16	2,85,037.75	2,53,282.00	2,21,167.86
	Add:Net Current Additions	1,496.53	3,810.11	-	-	-
	Less:Net Current Depreciation	31,865.39	32,014.47	31,755.75	32,114.14	32,114.14
	Closing Net fixed Assets	313986.58	286942.81	253282.00	221167.86	189053.72
	Average Net Fixed Assets	3,29,171.01	3,01,044.98	2,69,159.87	2,37,224.93	2,05,110.79

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

S. No	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	4	5	6	7	8
1	Opening Capital Cost	1,348.85	1,741.05	1,741.05	15,440.85	15,440.85
2	Add: Addition during the year / period	392.19	-	13,699.80	-	-
3	Less: De-capitalisation during the year / period	-	-	-	-	-
4	Less: Reversal during the year / period	-	-	-	-	-
5	Add: Discharges during the year / period	-	-	-	-	-
6	**Closing Capital Cost**	1,741.05	1,741.05	15,440.85	15,440.85	15,440.85
7	**Average Capital Cost**	1,544.95	1,741.05	8,590.95	15,440.85	15,440.85
	Cumulative Depreciation upto Previous Year	147.05	238.14	329.23	1137.09	1944.95
	Opening Net Fixed Assets	1,397.90	1,502.91	8,261.72	14,303.76	13,495.90
	Add:Net Current Additions	392.19	0.00	13699.80	0.00	0.00
	Less:Net Current Depreciation	91.09	91.09	807.86	807.86	807.86
	Closing Net fixed Assets	1,699.00	1,411.82	21153.66	13495.90	12688.04
	Average Net Fixed Assets	1,548.45	1,457.36	14,707.69	13,899.83	13,091.97

(Petitioner)

PART 1
FORM-1(IIA)

	Name of the Petitioner	NLC TAMILNADU POWER LIMITED
	Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
	Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

Fig Rs in Lakhs

Statement showing Return on Equity at Normal Rate:

Sr	Particulars	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7	8
	Return on Equity						
1	Gross Opening Equity (Normal)	1,82,208	1,82,550	1,82,999	1,84,142	1,84,142	1,84,142
2	Less: Adjustment in Opening Equity	-	-	-	-	-	-
3	Adjustment during the year	-	-	-	-	-	-
4	Net Opening Equity (Normal)	1,82,208	1,82,550	1,82,999	1,84,142	1,84,142	1,84,142
5	Add: Increase in equity due to addition during the year / period	371	201	59	-	-	-
7	Less: Decrease due to De-capitalisation during the year / period	54	2	-	-	-	-
8	Less: Decrease due to reversal during the year / period						
9	Add: Increase due to discharges during the year / period	25	249	1,085	-	-	-
10	Net closing Equity (Normal)	1,82,550	1,82,999	1,84,142	1,84,142	1,84,142	1,84,142
11	Average Equity (Normal)	1,82,379	1,82,775	1,83,571	1,84,142	1,84,142	1,84,142
12	Rate of ROE	18.78%	18.78%	18.78%	18.78%	18.78%	18.78%
13	Total ROE	34,254	34,329	34,478	34,586	34,586	34,586

(Petitioner)

PART 1
FORM-1(IIB)

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

Fig Rs in Lakhs

Statement showing Return on Equity at WAROI

Sr	Particulars	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7	8
	Return on Equity (beyond the original scope of work excluding additional capitalization due to Change in Law)						
1	Gross Opening Equity (Normal)	*221.78*	404.66	522.31	522.31	4,632.25	4,632.25
2	Less: Adjustment in Opening Equity						
3	Adjustment during the year						
4	**Net Opening Equity (Normal)**	***221.78***	**404.66**	**522.31**	**522.31**	**4,632.25**	**4,632.25**
5	Add: Increase in equity due to addition during the year / period	*182.88*	117.66	-	4,109.94	-	-
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)	***404.66***	**522.31**	**522.31**	**4,632.25**	**4,632.25**	**4,632.25**
11	Average Equity (Normal)	*313.22*	463.49	522.31	2,577.28	4,632.25	4,632.25
12	Rate of ROE	*10.50%*	14.70%	14.70%	14.70%	14.70%	14.70%
12	Total ROE	*32.89*	68.13	76.78	378.86	680.94	680.94

(Petitioner)

PART-I

FORM-2

Plant Characteristics

Name of the Petitioner		NLC TAMILNADU POWER LIMITED	
Name of the Generating Station		NTPL TPS (2X500 MW)	
Place (Region/District/State):		Southern/Tuticorin/Tamil Nadu	
1	Unit(s)/Block(s)/Parameters	Unit-I	Unit-II
2	**Installed Capacity (MW)**	500 MW	500 MW
3	**Schedule COD as per Investment Approval**	Mar'12(46 months)	Aug'12(51 months)
4	**Actual COD /Date of Taken Over** (as applicable)	18.06.2015	29.08.2015
5	**Pit Head or Non Pit Head**	Non Pit head	
6	Name of the Boiler Manufacture	M/s. BHEL	
7	Name of Turbine Generator Manufacture	M/s. BHEL	
8	**Main Steams Pressure at Turbine inlet (kg/Cm^2) abs[1].**	170	
9	**Main Steam Temperature at Turbine inlet** (^{0}C) [1]	537	
10	**Reheat Steam Pressure at Turbine inlet** (kg/Cm^2)[1]	39.6	
11	**Reheat Steam Temperature at Turbine inlet** (^{0}C) [1]	565	
12	**Main Steam flow at Turbine inlet under MCR condition (tons /hr)[2]**	1457	1457
13	**Main Steam flow at Turbine inlet under VWO condition (tons /hr)[2]**	1529.85	1529.85
14	**Unit Gross electrical output under MCR /Rated condition (MW)[2]**	500	500
15	**Unit Gross electrical output under VWO condition (MW)[2]**	525	525
16	**Guaranteed Design Gross Turbine Cycle Heat Rate** (kCal/kWh)[3]	1932	
17	**Conditions on which design turbine cycle heat rate guaranteed**		
18	% MCR	100	100
19	% Makeup Water Consumption	3	3
20	Design Capacity of Make up Water System	20MLD I pass RO Outlet.	
21		DM Water 150m3/hr	DM Water 150m3/hr
22	Design Capacity of Inlet Cooling System	56,160m3/hr	56,160m3/hr
23	Design Cooling Water Temperature (^{0}C)	33	33
24	Back Pressure	77mmHg(abs)	77mmHg(abs)
25	Steam flow at super heater outlet under BMCR condition (tons/hr)	1590	1590
26	Steam Pressure at super heater outlet under BMCR condition) (kg/Cm^2)	178	178
27	Steam Temperature at super heater outlet under BMCR condition (^{0}C)	540	540
28	Steam Temperature at Reheater outlet at BMCR condition (^{0}C)	568	568
29	Design / Guaranteed Boiler Efficiency (%)[4]	85.90	85.90
30	Design Fuel with and without Blending of domestic/imported coal	Domestic-3700GCV Import-5900GCV	Domestic-3700GCV Import-5900GCV
31	**Type of Cooling Tower**	Natural Draft	Natural Draft
32	Type of cooling system[5]	Closed circuit sea water	Closed circuit sea water
33	**Type of Boiler Feed Pump[6]**	Motor driven Feed pump-1No Turbine driven feed pump-2Nos	Motor driven Feed pump-1No Turbine driven feed pump-2Nos
34	**Fuel Details[7]**		
35	-Primary Fuel	Coal	Coal
36	-Secondary Fuel	HFO LDO for start up	HFO LDO for start up
37	-Alternate Fuels	NIL	NIL

Special Features/Site Specific Features[8]

Special Technological Features[9]: Boiler based on CFBC Technology

(Petitioner)

PART 1
FORM-3

Normative parameters considered for tariff computations

Name of the Petitioner	NLC TAMILNADU POWER LIMITED						
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION						
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu						
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%
Base Rate of Return on Equity on Add.	%						
Effective Tax Rate [4]	%	17.47%	17.47%	17.47%	17.47%	17.47%	17.47%
Target Availability (NAPAF)	%	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%
Auxiliary Energy Consumption	%	6.25%	5.25%	5.25%	5.25%	5.25%	5.25%
Gross Station Heat Rate	kCal/kWh	2,358.84	2,347.60	2,347.60	2,347.60	2,347.60	2,347.60
Specific Fuel Oil Consumption	ml/kWh	0.500	0.500	0.500	0.500	0.500	0.500
Cost of Coal/Lignite for WC[1]	in Days	50.000	50.000	50.000	50.000	50.000	50.000
Cost of Main Secondary Fuel Oil for WC[1]	in Days	60.000	60.000	60.000	60.000	60.000	60.000
Fuel Cost for WC	in Days		NOT APPPLICABLE				
Liquid Fuel Stock for WC[2]	in Months		NOT APPPLICABLE				
O&M Expenses	Rs lakh /	25.840	27.170	28.600	30.100	31.680	33.340
Maintenance Spares for WC	% of O&M	20.000	20.000	20.000	20.000	20.000	20.000
Receivables for WC	in Days	45.000	45.000	45.000	45.000	45.000	45.000
Storage capacity of Primary fuel	MT	5 Lakh	6 Lakh	7 Lakh	8 Lakh	9 Lakh	10 Lakh
SBI 1 Year MCLR plus 350 basis point[3]	%	12.00%	11.90%	11.90%	11.90%	11.90%	11.90%
Blending ratio of domestic coal/imported coal	NA	70:30	70:30	70:30	70:30	70:30	70:30
Norms for consumption of reagent							
Specific Limestone consumption for Wet Limestone FGD							
Specific Limestone consumption for Lime Spray Dryer or Semi-dry FGD							
Specific consumption of sodium bicarbonate							
Specific Limestone consumption for CFBC based generating station							
specific urea consumption of the SNCR							
Specific ammonia consumption of the SCR							
Transit and Handling Losses of coal	Domestic Coal: 0.8% Imported Coal: 0.2%	Domestic Coal: 1% Imported Coal: 0.2%	Domestic Coal: 1% Imported Coal: 0.2%	Domestic Coal: 1% Imported Coal: 0.2%	Domestic Coal: 1% Imported Coal: 0.2%	Domestic Coal: 1% Imported Coal: 0.2%	Domestic Coal: 1% Imported Coal: 0.2%

Petitioner

Note 1) For Coal based/lignite based generating stations
2) For Gas Turbine Combined Cycle generating stations duly taking into account the mode of operation on gas fuel and liquid fuel
3) Mention relevant date
4) Effective tax rate is to be computed in accordance with Regulation 31 i.e. actual tax (or advance tax)/gross income, where gross income refers the profit before tax.
5) To be submitted at the time of truing up based on RPC certification.

PART 1
FORM- 5

Abstract of Admitted Capital Cost for the existing Projects

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

Last date of order of Commission for the project	Date (DD-MM-YYYY)	01.08.2024
Reference of petition no. in which the above order was passed	Petition no.	254/GT/2020
Following details (whether admitted and /or considered) as on the last date of the period for which tariff is approved, in the above order by the Commission:		
Capital cost as on 01.04.2024	(Rs. in lakh)*	601853.91
Amount of un-discharged liabilities included in above (& forming part of admitted capital cost)		-
Amount of un-discharged liabilities corresponding to above admitted capital cost (but not forming part of admitted capital cost being allowed on cash basis)		-
Gross Normative Debt		427705.02
Cumulative Repayment		259287
Net Normative Debt		168418
Normative Equity		174149
Cumulative Depreciation		259287
Freehold land		3488

(Petitioner)

PART 1
FORM- 6

Financial Package up to COD

Name of the Petitioner	NLC TAMILNADU POWER LIMITED					
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION					
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu					
	Financial Package as Approved		Financial Package as on COD		As Admitted on COD	
	Currency and Amount[3]		Currency and Amount[3]		Currency and Amount[3]	
1	2	3	4	5	6	7
Loan-I						
Loan-II						
Loan-III						
	Not Applicable					
and so on						
Equity-						
Foreign						
Domestic						
Total Equity						
Debt : Equity Ratio						

Note:

1. Say Rs. 80 Cr. + US$ 200 m or Rs. 1480 Cr. including US$ 200 m at an exchange rate of US$=Rs70
2. Provide details on commercial operation as on COD of each Unit
3. For example: US $ 200m, etc.

(Petitioner)

PART 1
FORM- 7

Details of project specific loans

Name of the Petitioner	NLC TAMILNADU POWER LIMITED				
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION				
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu				
Source of Loan[1]	Loan 1	Loan 2	Loan 3		
Currency[2]	Indian Rupee	Indian Rupee	Indian Rupee		
Amount of Loan sanctioned					
Amount of Gross Loan drawnupto 30.09.2023/COD					
Interest Type[6]					
Fixed Interest Rate, ifapplicable		Not Applicable			
Base Rate, if Floating Interest[7]					
Margin, if Floating Interest[8]					
Are there any Caps/Floor[9]					
If above is yes, specifycaps/floor					
Moratorium Period[10]					
Moratorium effective from					
Repayment Period[11]					
Repayment effective from					
Repayment Frequency[12]					
Repayment Instalment[13,14]					
Base Exchange Rate[16]					
Are foreign currency loanhedged?					
If above is yes, specify details[17]					

Note:

1. Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.
2. Currency refers to currency of loan such as US$, DM, Yen, Indian Rupee etc.
3. Details are to be submitted as on 31.03.2019 for existing assets and as on COD for the remaining assets.
4. Where the loan has been refinanced, details in the Form is to be given for the loan refinanced. However, the details of the original loan is to be given separately in the same form.
5. If the Tariff in the petition is claimed separately for various units, details in the Form is to be given separately for all the units in the same form.
6. Interest type means whether the interest is fixed or floating.
7. Base rate means the base as PLR, MCLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.
8. Margin means the points over and above the floating rate.
9. At times caps/floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.
10. Moratorium period refers to the period during which loan servicing liability is not required.
11. Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.
12. Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.
13. Where there is more than one drawl/repayment for a loan, the date & amount of each drawl/repayment may also be given separately
14. If the repayment installment amount and repayment date cannot be worked out from the data furnished above, the repayment schedule to be furnished separately.
15. In case of Foreign loan, date of each drawl& repayment along with exchange rate at that date may be given.
16. Base exchange rate means the exchange rate prevailing as on 31.03.2019 or COD, whichever is later
17. In case of hedging, specify details like type of hedging, period of hedging, cost of hedging, etc.
18. In case of foreign loans, provide details of exchange rate considered on date of each repayment of principal and date of interest payment.
19. At the time of truing up rate of interest with relevant reset date (if any) to be furnished separately
20. At the time of truing up provide details of refinancing of loans considered earlier. Details such as date on which refinancing done, amount of refinanced loan, terms and conditions of refinanced loan, financing and other charges incurred for refinancing, etc.

(Petitioner)

Details of Allocation of corporate loans to various projects							PART 1 FORM- 8
Name of the Petitioner	NLC TAMILNADU POWER LIMITED						
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION						
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu						
Source of Loan[1]		Loan 1	Loan 2	Loan 3			
Currency[2]		Indian Rupee	Indian Rupee	Indian Rupee			
Amount of Loan sanctioned		0	0	0			
Amount of Gross Loan drawn upto30.09.2023/COD [3,4,5,13,15]							
Interest Type[6]							
Fixed Interest Rate, if applicable							
Base Rate, if Floating Interest[7]							
Margin, if Floating Interest[8]			Not Applicable				
Are there any Caps/Floor[9]							
If above is yes, specify caps/floor							
Moratorium Period[10]							
Moratorium effective from		0	0	0			
Repayment Period[11]		0	0	0			
Repayment effective from		0	0	0			
Repayment Frequency[12]		0	0	0			
Repayment Instalment[13,14]		0	0	0			
Base Exchange Rate[16]		0	0	0			
Are foreign currency loan hedged?		0	0	0			
If above is yes, specify details[17]		0	0	0			
		Distribution of loan packages to various projects					
Name of the Projects							Total
NUPPL Thermal Power Station (3X660 MW)		100%	100%	100%			100%

Note:

1. Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc
2. Currency refers to currency of loan such as US$, DM, Yen, Indian Rupee etc.
3. Details are to be submitted as on 31.03.2019 for existing assets and as on COD for the remaining assets.
4. Where the loan has been refinanced, details in the Form is to be given for the loan refinanced. However, the details of the original loan is to be given separately in the same form.
5. If the Tariff in the petition is claimed separately for various units, details in the Form is to be given separately for all the units in the same form.
6. Interest type means whether the interest is fixed or floating.
7. Base rate means the base as PLR, MCLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.
8. Margin means the points over and above the floating rate.
9. At times caps/floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.
10. Moratorium period refers to the period during which loan servicing liability is not required.
11. Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.
12. Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.
13. Where there is more than one drawl/repayment for a loan, the date & amount of each drawl/repayment may also be given separately.
14. If the repayment instalment amount and repayment date cannot be worked out from the data furnished above, the repayment schedule to be furnished separately.
15. In case of Foreign loan, date of each drawl & repayment along with exchange rate at that date may be given.
16. Base Exchange Rate means the exchange rate prevailing as on 31.03.2019 or COD, whichever is later
17. In case of hedging, specify details like type of hedging, period of hedging, cost of hedging, etc.
18. In case of foreign loans, provide details of exchange rate considered on date of each repayment of principal and date of interest payment.
19. At the time of truing up rate of interest with relevant reset date (if any) to be furnished separately
20. At the time of truing up provide details of refinancing of loans considered earlier. Details such as date on which refinancing done, amount of refinanced loan, terms and conditions of refinanced loan, financing and other charges incurred for refinancing etc.

(Petitioner)

Form-9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

S. No.	Head of Work / Equipment	ACE Projected (2024-25) in Amount Rs. Lakhs				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis	Un-discharged Liability included in column 3	Cash basis (Discharge estimated)	IDC included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9
1	Srengthening/ rehabilitation of NTPL Plant	23.75	-	24		25(2)(a)	Due to close proximity to sea and exposure to severe corrosive environmental conditions, Civil structures at NTPL plant are prone to corrosion activity and deterioration and hence, the civil structures have to periodically strengthened/rehabilitated from time to time to increase the useful life of the structures. At present, corrosion induced deterioration have been observed at various buildings such as power house and auxiliary buildings. Moreover, buildings such as Circulating water pump house, ACW pump house, Desalination plant etc., are exposed to severe corrosive environment since these buildings handle sea water for various processes. It is essential that these civil Structures at NTPL plant have to be strengthened/rehabilitated periodically. So it is proposed to carry out the strengthening/ rehabilitation works for various civil structures at NTPL	
2	Construction of Protective shed covering for Ash handling System at NTPL plant	63.57	-	64		25(2)(a)	The exisitng protective RCC covers to protect various critical equipments of Ash handling system viz., for erection of new dryer units, protecting the conveying air compressor filter unit and blow off unit were highly corroded and served its useful life. Hence, it was replaced with new protective covers	
3	Supplying and Erecting steel platforms in various locations of Unit 1 and Unit 2 Ash Handling System	98.94	-	99		26(1)(e)	In certain areas of Ash Handling System, platforms are not adequate for safe working and in some areas, additional platforms are required to carry out running maintenance / Breakdown maintenance works safely. As the AHS system is crossing 5 years after commissioning, the major works like need of ash pipes changing, all basalt bends changing have started. To execute these works existing platforms has to be strengthened and permanent additional platforms are also required for ensuring safety during execution of works	
4	Computers and pheripherals	22.86	-	23		25(2)(a)	Computers and Laptops are essential for carrying out daily operation and maintance activity and it was part of original plant establishment. As the life of such asset is only 3 years, as per the regulation, the replacement of the same is being claimed under Reg 25(2)(a).	

S. No.	Head of Work / Equipment	ACE Projected (2024-25) in Amount Rs. Lakhs				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis	Un-discharged Liability included in column 3	Cash basis (Discharge estimated)	IDC included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9
5	Replacement of existing corroded seal trough plate and Erection of new seal trough plate along with the supply of material for one Unit	65.39	-	65		25(2)(a)	A boiler seal trough plate seals the furnace and prevents the boiler interior from coming into contact with the surrounding atmosphere. As the existing seal trough plate in Unit 2 is highly corroded due to corrosite environment and the same has served its life for more than 10 years, it is proposed to replace the existing corroded seal trough plate with new seal trough plate	
6	General illumination System-Material supply Erection and commissioning of 150 Nos of new GRP street light poles with civil foundation	57.91	-	58		25(2)(a)	In NTPL, General illumination system for peripheral roads consists of 339 Nos of street light poles & approach road has 53 Nos of street light poles, totaling 392 street light poles of height 10.5meter. Due to heavy humid atmospheric conditions, these GI street light poles are subjected to corrosion. At present, the lighting poles in peripheral roads and approach roads are very much corroded and almost at end of their life. Hence, to keep the illumination system healthy, purchase of corrosion free GRP lighting poles was initiated to replace the GI Lighting pole in phased manner	
7	Electrical-Switchyard and Transformers-Supply and application of RTV Silicone rubber high voltage insulator coating on insulators and bushings of 400/220kV GIS and Transformers	69.95	-	70		25(2)(a)	In both 400 KV and 220 KV outdoor yard of NTPL, there are many number of porcelain insulators and bushings installed in the equipment viz., Lightning Arrestors (LA), Capacitive Voltage Transformers (CVTs), Wave Traps, Bus Post Insulators. Due to heavily polluted environment combined with foggy atmospheric condition prevailing in NTPL, all the porcelain insulators are subjected to corona discharges and lekage currents, which leads to intermittent arcing. This arcing has been affecting the insulators and consequently resulting flash over, tripping and damage of associated equipment such as outgoing feeders, GT, ST and ICT. Tripping of any of these will affect the evacuation and power generation of NTPL. NTPL has faced forced outages due to such flash over in the year 2015. To prevent the discharges and effectively reduce the arcing, special RTV (Room Temperature Vulcanising) Silicone rubber high voltage insulator coating of 500 micron thickness ATH (Aluminium Trihydrate) was done for all porcelian insulators & bushings in the year 2016 which proved to be very efficient in arresting visible corona discharges and arcing. This coating will impart hydrophobic property to porcelian insulators and prevent formation of water layers on insulator surface and wil encapsulate the contaminants on insulator surface. This will prevent occurrence of surface leakage current, discharge and consequent arcing. Since the average life of coating is around 8 years, and the exisitng coating is nearing expiry, it is proposed to replace the existing coating with new coating.	

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S. No.	Head of Work / Equipment	ACE Projected (2024-25) in Amount Rs. Lakhs				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis	Un-discharged Liability included in column 3	Cash basis (Discharge estimated)	IDC included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9
8	Purchase of Silicon Polymer Surge Arrestor for 400KV and 220KV Switchyard systems	23.82	-	24		25(2)(C)	Surge arrestors are critical equipment protecting switchyard equipments from abnormal high voltage surge which arise due to lighning strikes and switching operations in power system. Due to polluted and coastal environment combined with	
9	Installation of Roof Top Solar in Office buildings and plants -Commissioning of 300 KWp(AC) rooftop Solar PV Power System including all auxiliaries and Comprehensive O&M for a period of 05 years in various installations / buildings at NTPL	174.49	-	174		26(1)(b)	In line with India's commitment under COP 26 for a transition to a low-carbon economy and achieving Net Zero goal to reduce greehouse gas emissions and to combat climate change, NTPL is exploring possible ways to contribute to the commitment. One such contribution is to install 300 KWp(AC) Roof top solar projects in office buildings in NTPL thermal power plant. This will result in reduced auxiliary power consumption of NTPL thus contributing to COP committment	
10	Purchase of Automatic type-3 phase relay test kit	48.53	-	49		25(2)(a)	All major protection panels in NTPL such as Genertor Protection Panel, Switchyard Protections, HT, LT equipment panels are protected using numerical relays of reputed brands. As per CEA standards, these relays are required to be tested in different periodicity to ensure their healthiness. As the available megger test kit supplied along with package has served its life more than 10 years and failed, it is proposed to replace the same by procuring computer based fully automatic relay test kit which will considerably reduce testing time of relays as well as accurately check all functionalities in main relays	
11	Construction of protective shed inside TTPS plant area	138.38	-	138		26(1)(d)	Tuticorin Thermal Power Plant was nearby site to NTPL Power Plant. During September 2023, a spall of concrete from shell at top of NDCT 1 fell into TTPS main plant approach road. In this regard, TTPS has sent letter to NTPL to address the issue. To solve the issue, it was decided to construct a protective shed over the TTPS main approach road for a length of 50 m in alignment with NDCT 1 where the debris fall. Meanwhile, during repairing works of NDCT 1 also, to prevent falling of debris this protective shed was highly necessary to ensure safety of working personnels and public	
12	NTPL- Construction of 2 nos of watch tower (Morcha) at NTPL plant	30.47	-	30		26(1)(d)	The Central Industrial Security Force (CISF) is a premier multi-skilled security agency of the country, mandated to provide security to Industrial zones like Thermal Power Station of NTPL. To monitor the situations at NTPL main gate and rear gate during public strikes, CISF has requested to construct 2 nos of Morcha (watch tower). In this regard, it is proposed to construct 2 nos of watch tower (Morcha) at NTPL plant	

S. No.	Head of Work / Equipment	ACE Projected (2024-25) in Amount Rs. Lakhs				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis	Un-discharged Liability included in column 3	Cash basis (Discharge estimated)	IDC included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9
13	Purchase of Roller Bearing Slewing ring for SCR	99.89	-	100		25(2)(a)	The Stacker cum Reclaimer (SCR) is used for both stacking & reclaiming the coal in the stockyard. Roller bearing slewing ring is the main part of the SCR used in the slewing mechanism of the boom conveyor to slew it to the required position for reclaiming and stacking the coal. These Roller bearing slewing ring transmit the weight of the superstructure to the under carriage, and the torque for slewing the superstructure to the undercarriage. Since SCRs are in service since commissioning in 2015, the bearing rollers and the gear teeth were wear out in SCR 1. Operating the SCRs beyond this limit will lead to major structural damage. This wear is monitored periodically by measuring the height of the Roller bearing slewing ring. This height is near the critical value and hence it is proposed to replace the Roller bearing slewing ring in SCR 1	
14	Cyber Security Audit of IT & OT Infrastructure of NTPL	20.00	-	20		26(1)(b)	NTPL OT (Operational Technology) Infrastructure includes the DCS Control System, HMI systems, OPC servers, workstations, as well as the SCADA and Energy Management System networks, equipment, engineering stations, servers, and workstations. The IT and OT systems of the organization are vital components of the IT & OT infrastructures. Therefore, periodic assessments are essential to stay ahead of threats by identifying vulnerabilities and mitigating risks. As per the CEA(Cybersecurity in Power Sector Guidelines 2021) Article 14 Cyber Security Audit point (b) states "The responsible entity shall, through a CERT-In empaneled Cybersecurity OT Auditor, get their IT and OT systems audited at least once every six (6) months. They shall address all critical and high vulnerabilities within one month, and medium and low non-conformities before the next audit. The effective closure of all non-conformities shall be verified during the subsequent audit. In view of the above, it is proposed to conduct cybersecurity audit of NTPL's IT and OT infrastructure, by CERT-In empaneled Information Security Auditing Organizations..	

S. No.	Head of Work / Equipment	ACE Projected (2024-25) in Amount Rs. Lakhs				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis	Un-discharged Liability included in column 3	Cash basis (Discharge estimated)	IDC included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9
15	Supply Installation, Commissioning of CCTV Surveillance System with Video Management Software, storage server and accessories at NTPL Plant peripheral locations	124.41	-	124		26(1)(d)	AC/CISF, NTPL has requested for the installation of additional CCTV cameras at NTPL plant peripheral locations for strengthening of perimeter security of NTPL plant and also for effective monitoring of CCTV surveillance security system. department for systematic improvement have suggested and recommended for the installation additional CCTV cameras at NTPL plant peripheral locations for strengthening of CCTV security system and also they have suggested for installation of CCTV camera system with latest features such as Night vision, Motion detection, video analytics, facial recognition and automatic number plate recognition system and also suggested to keep CCTV video recording back up for a minimum period of 3 months. In view of the above, it is proposed to install total 46 Nos. of CCTV cameras at identified locations for strengthening surveillance system at NTPL plant peripheral locations and also for effective monitoring and safety of the plant and machinery equipments	
	Total	1,062		1,062				

(Petitioner)

Form-9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

S. No.	Head of Work / Equipment	ACE Projected (2025-26) in Amount Rs. Lakhs				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis	Un-discharged Liability included in column 3	Cash basis (Discharge estimated)	IDC included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9
1	LVS System upgradation	75	-	75		25(2)(C)	The OEM of the operating system, i.e., Microsoft, has stopped supporting Windows 7 . No feature & security updates are available for these operating systems. As per CEA cybersecurity guidelines for power sectors – "Article 7 Phasing out of Legacy System", "...The Responsible Entity shall ensure that the Information Security Division shall draw the list of all communicable equipment's/systems nearing end life or are left without support from OEM...." Thus in order to comply with CEA guidelines the existing legacy LVS and associated software need to be upgraded	
2	MaxDNA HMI Upgradation	30	-	30		25(2)(C)	The OEM of the operating system, i.e., Microsoft, has stopped supporting Windows 7 . No feature & security updates are available for these operating systems. As per CEA cybersecurity guidelines for power sectors – "Article 7 Phasing out of Legacy System", "...The Responsible Entity shall ensure that the Information Security Division shall draw the list of all communicable equipment's/systems nearing end life or are left without support from OEM...." Thus in order to comply with CEA guidelines the existing legacy MaxDNA HMI and associated software need to be upgraded	
3	Upgradation of existing Anolog based public address system to IP based PA system for emergency communication in service building,AO building and other plant critical locations	40	-	40		25(2)(C)	As per CEA guidelines and National disaster management plan, Public Address System in thermal power plants are essentially required during emergencies and disasters to sensitize and evacuate the working personnels. As the exisitng analog based public address system has been outdated, it is proposed to replace the same with IP based PA system for emergency communication in service building,AO building and other plant critical locations	

S. No.	Head of Work / Equipment	ACE Projected (2025-26) in Amount Rs. Lakhs				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis	Un-discharged Liability included in column 3	Cash basis (Discharge estimated)	IDC included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9
4	Strengthening of civil structures against	50	-	50		25(2)(a)	The civil structures at NTPL plant are prone to corrosion activity and deterioration due to close proximity to sea and exposure to severe corrosive environmental conditions, and hence, the civil structures have to be periodically strengthened/ rehabilitated to increase the useful life of the structures. At present, corrosion induced deterioration have been observed at various buildings such as power house and auxiliary buildings etc. Moreover, buildings such as Circulating water pump house, ACW pump house, Desalination plant etc., are exposed to severe corrosive environment since these buildings handle sea water for various processes. So, it is imperative that these civil Structures at NTPL plant have to be strengthened/ rehabilitated periodically. So, it is proposed to carry out the strengthening/ rehabilitation works for various civil structures at NTPL.	
	Total	195		195				

(Petitioner)

Form-9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

S. No.	Head of Work / Equipment	ACE Projected (2026-27) in Amount Rs. Lakhs				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis	Un-discharged Liability included in column 3	Cash basis (Discharge estimated)	IDC included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9
1	Design, supply, erection, testing and commissioning of complete dry ash pressure conveying system for augmentation of ash handling system at NTPL	13,700	-	13,700		26(1)(i)	NLCIL has been allotted Talabira coal mines with NTPL as End USer Plant and subsequently, Coal India has stopped the supply of ECL coal to NTPL. Also, due to various guidelines issued by Government of India, procurement of import coal became very difficult. Due to these reasons, ECL coal availability became nil & import coal availability is only intermittent. With the existing Fly ash evacuation and conveying system, the entire fly ash generated from the Boiler could not be handled and conveyed out to the fly ash silos from ESP hoppers, especially during the Indian coal firing with an ash content of more than 50%. Due to high ash content in indigenous coal, and stacking of ash in Unit-1 ESP led to Unit-1 C pass C3 and C4 first hoppers collapsed on 21.05.23 and then Unit 1 was managed with three passes till stopping the Unit for Major Overhaul on 19.07.23. Furthermore, in the absence of imported coal, when NTPL boilers are fueled by MCL and Talabira coal, the ash conveying capacity is limited to 2250 tons per day for each unit, restricting the declared capacity (DC) to 300 MW. NTPL Partial loss due to ash evacuation issue for the FY 2023-24 is 1618.709 MU. Hence in order to ensure continuous generation, It is proposed to augment the existing Ash handling system by considering 436 T of Talabira coal firing for 500 MW power generation. Detailed technical justificationa and cost benefit analysis is submitted as Annexure	
	Total	**13,700**		**13,700**				

(Petitioner)

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Form-9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner		NLC TAMILNADU POWER LIMITED						
Name of the Generating Station:		NTPL 2 x 500 MW THERMAL POWER STATION						
Place (Region/District/State):		Southern/Tuticorin/Tamil Nadu						
S. No.	Head of Work / Equipment	ACE Projected (2027-28) in Amount Rs. Lakhs				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis	Un-discharged Liability included in column 3	Cash basis (Discharge estimated)	IDC included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9
1	NIL							
2								
3								
4								
5								
Total		-						

(Petitioner)

Form-9

Year wise Statement of Additional Capitalisation after COD								
	Name of the Petitioner	NLC TAMILNADU POWER LIMITED						
	Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION						
	Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu						
S. No.	Head of Work / Equipment	ACE Projected (2028-29)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis	Un-discharged Liability included in column 3	Cash basis (Discharge estimated)	IDC included in col. 3			
1	2	3	4	(5 = 3 - 4)	6	7	8	9
	Nil							

(Petitioner)

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PART 1
FORM- 10

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

	Projected					Admitted				
Financial Year (Starting from COD)[1]	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5 & So**
1	2	3	4	5	6	7	8	9	10	11
Amount capitalised in Work/ Equipment	**1,889**	**3,810**	**13,700**	**-**	**-**					
Financing Details										
Loan-1	**1,322**	**2,667**	**9,590**							
Loan-2										
Loan-3										
Total Loan[2]										
Equity										
Internal Resources	**567**	**3,810**	**13,700**	**-**	**-**					
Others (Pl. specify)										
Total	**1,322**	**2,667**	**9,590**	**-**	**-**					

(Petitioner)

PART 1
FORM 11

Calculation of Depreciation

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

(Amount in Rs Lakh)

S. No.	Name of the Assets[1]	Gross Block as on COD 31.03.2025	Depreciation Rates as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year Unit I
1	2	3	4	5 = Col.3 X Col.4
Will be submitted during true up				

(Petitioner)

Calculation of Depreciation

PART 1
FORM 11

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

(Amount in Rs Lakh)

S. No.	Name of the Assets[1]	Gross Block as on COD 31.03.2026	Depreciation Rates as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year Unit I
1	2	3	4	5 = Col.3 X Col.4
Will be submitted during true up				

(Petitioner)

PART 1
FORM 11

Calculation of Depreciation

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

(Amount in Rs Lakh)

S. No.	Name of the Assets[1]	Gross Block as on COD 31.03.2027	Depreciation Rates as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year Unit I
1	2	3	4	5 = Col.3 X Col.4
Will be submitted during true up				

(Petitioner)

PART 1
FORM 11

Calculation of Depreciation

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

(Amount in Rs Lakh)

S. No.	Name of the Assets[1]	Gross Block as on COD 31.03.2028	Depreciation Rates as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year Unit I
1	2	3	4	5 = Col.3 X Col.4
Will be submitted during true up				

(Petitioner)

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Calculation of Depreciation

PART 1
FORM 11

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

(Amount in Rs Lakh)

S. No.	Name of the Assets[1]	Gross Block as on COD 31.03.2029	Depreciation Rates as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year Unit I
1	2	3	4	5 = Col.3 X Col.4
Will be submitted during true up				

(Petitioner)

STAEMENT OF DEPRECIATION

PART I
FORM 12

Name of the Petitioner		NLC TAMILNADU POWER LIMITED					
Name of the Generating Station:		NTPL 2 x 500 MW THERMAL POWER STATION					
Place (Region/District/State):		Southern/Tuticorin/Tamil Nadu					
							Fig Rs in Lakhs
S. No.	**Particulars**	***2023-24***	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
1	**2**		**4**	**5**	**6**	7	**8**
1.	Opening Capital Cost	*608098*	6,09,849.58	6,11,738.30	6,15,548.41	6,29,248.21	6,29,248.21
2.	Closing Capital Cost	*609850*	6,11,738.30	6,15,548.41	6,29,248.21	6,29,248.21	6,29,248.21
3.	**Average Capital Cost**	***608974***	**6,10,793.94**	**6,13,643.35**	**6,22,398.31**	**6,29,248.21**	**6,29,248.21**
4.	Freehold land	*3396*	3,395.62	3,395.62	3,395.62	3,395.62	3,395.62
5.	Rate of depreciation	*5.23%*	5.23%	5.23%	5.23%	5.23%	5.23%
6.	Depreciable value	*545020*	5,46,658.48	5,49,222.96	5,57,102.42	5,63,267.33	5,63,267.33
7.	Balance useful life at the beginning of the period	*17.41*	16.41	15.41	14.41	13.41	12.41
8.	Remaining depreciable value	*311814*	2,81,617.89	2,52,229.68	2,28,003.58	2,01,604.88	1,68,682.88
9.	**Depreciation (for the period)**	*31861.24*	31,956.48	32,105.56	32,563.61	32,922.00	32,922.00
10.	**Depreciation (annualised)**	***31861.24***	31,956.48	32,105.56	32,563.61	32,922.00	32,922.00
11.	Cumulative depreciation at the beginning of the period	*233207*	2,65,040.59	2,96,993.28	3,29,098.84	3,61,662.45	3,94,584.45
12.	Cumulative depreciation at the end of the period	*265068*	2,96,997.07	3,29,098.84	3,61,662.45	3,94,584.45	4,27,506.44
13.	Less: Cumulative depreciation adjustment on account of un-discharged liabilities deducted as on 01.04.2009	*0*	-	-	-	-	-
14.	Less: Cumulative depreciation adjustment on account of de-capitalisation	*27*	3.79	-	-	-	-
15.	Net Cumulative depreciation at the end of the period	*265041*	2,96,993.28	3,29,098.84	3,61,662.45	3,94,584.45	4,27,506.44

PETITIONER

Calculation of Weighted Average Rate of Interest on Actual Loans1

PART I
FORM 13

Name of the Petitioner	NLC TAMILNADU POWER LIMITED					
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION					
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu					
Particulars	**2023-24**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
Gross loan - Opening						
Cumulative repayments of Loans upto previous year						
Net loan - Opening						
Add: Drawal(s) during the Year						
Less: Repayment(s) of Loans during the year						
Net loan - Closing	**Company weighted average rate of loan for FY 2023-24 of 8.67% has been considered for Tariff 2024-29 .Actual details will be submitted at the time of Truing up.**					
Average Net Loan						
Rate of Interest on Loan on annual basis						
Interest on loan	8.67%	8.67%	8.67%	8.67%	8.67%	8.67%

Note:

1. In case of Foreign Loans, the calculations in Indian Rupees is to be furnished. However, the calculations in Original currency is also to be furnished separately in the same form.

(Petitioner)

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Draw Down Schedule for Calculation of IDC & Financing Charges

Name of the Petitioner		NLC TAMILNADU POWER LIMITED		
Name of the Generating Station:		NTPL 2 x 500 MW THERMAL POWER STATION		
Place (Region/District/State):		Southern/Tuticorin/Tamil Nadu		
Sl. No.	**Draw Down**	**Quarter n (COD)**		
	Particulars	**Quantum in Foreign currency**	**Exchange Rate on draw down date**	**Amount in Indian Rupee (Rs Lakh)**
1	**Loans**			
1.1	**Foreign Loans**			
1.1.1	**Foreign Loan 1**			
	Draw down Amount			
	IDC			
	Financing charges	Not Applicable		
	Foreign Exchange RateVariation			
	Hedging Cost			
1.1.2	**Foreign Loan 2**			
	Draw down Amount			
	IDC			
	Financing charges			
	Foreign Exchange RateVariation			
	Hedging Cost			
1.1.3	**Foreign Loan 3**			
	Draw down Amount			
	IDC			
	Financing charges			
	Foreign Exchange RateVariation			
	Hedging Cost			
1.1	**Total Foreign Loans**			
	Draw down Amount			
	IDC			
	Financing charges			
	Foreign Exchange RateVariation			
	Hedging Cost			
Sl. No.	**Draw Down**	**Yearwise**		
	Particulars	**Quantum in Foreign currency**	**Exchange Rate on draw down date**	**Amount in Indian Rupee (Rs Lakh)**
1.2	**Indian Loans**			
1.2.1	**Indian Loan 1**			
	Draw down Amount			
	IDC			
	Financing charges			
	Draw Down	Not Applicable		
	Indian Loan 2			
	Draw down Amount			
	IDC			
	Financing charges			
1.2	**Total Indian Loans**			
	Draw down Amount			
	IDC			
	Financing charges			
2	**Equity**			
2.1	**Foreign equity drawn**			
2.2	**Indian equity drawn**			
	Total equity deployed			

Note:

1. Drawal of debt and equity shall be on paripassu basis quarter wise to meet the commissioning schedule. Drawal of higher equity in the beginning is permissible.

2. Applicable interest rates including reset dates used for above computation may be furnished separately.

3. In case of multi unit project details of capitalization ratio used to be furnished.

(Petitioner)

PART-I

FORM - 15

Details/Information to be Submitted in respect of Fuel for Computation of Energy Charges[1]

Name of the Petitioner: NLC TAMILNADU POWER LTD

Name of the Generating Station: 2X500MW - COAL BASED THERMAL POWER PLANT IN TUTICORIN

S.N	PARTICULARS	UNIT	Apr-23					May-23					Jun-23				
			DOMESTIC COAL				IMPORT COAL	DOMESTIC COAL				IMPORT COAL	DOMESTIC COAL				IMPORT COAL
			MCL (RAW)	TALABIRA	LIGNITE	ECL		MCL (RAW)	TALABIRA	LIGNITE	ECL		MCL (RAW)	TALABIRA	LIGNITE	ECL	
A)	OPENING QUANTITY																
1	Opening Quantity of Coal/Lignite	MT	181132.91	202407.98	0.00	0.00	0.00	99375.67	112847.39	0.00	0.00	0.00	153165.76	225195.15	0.00	0.00	0.00
2	Value of Stock	INR	767848471.71	848770178.74	0.00	0.00	0.00	424934401.94	475654713.61	0.00	0.00	0.00	644831242.67	939440340.19	0.00	0.00	0.00
B	QUANTITY																
3	Quantity of Coal/Lignite supplied by Coal/Lignite Company	MT	145155.00	132699.00	0.00	0.00	0.00	219238.00	274780.00	0.00	0.00	0.00	145988.00	75916.00	0.00	0.00	76050.00
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	MT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	Coal/Lignite supplied by Coal/Lignite supply Company(3+4)	MT	145155.00	132699.00	0.00	0.00	0.00	219238.00	274780.00	0.00	0.00	0.00	145988.00	75916.00	0.00	0.00	76050.00
6	Normative Transit & Handling Losses (For Coal/Lignite based Projects)	MT	1161.24	1061.59	0.00	0.00	0.00	1753.90	2198.24	0.00	0.00	0.00	1167.90	607.33	0.00	0.00	152.10
7	Net Coal/Lignite Supplied (5-6)	MT	143993.76	131637.41	0.00	0.00	0.00	217484.10	272581.76	0.00	0.00	0.00	144820.10	75308.67	0.00	0.00	75897.90
C)	PRICE																
8	Amount charged by the Coal/Lignite Company	INR	261721722.75	197608715.85	0.00	0.00	0.00	381612239.94	409188637.00	0.00	0.00	0.00	255597250.28	114993001.84	0.00	0.00	576987345.21
9	Adjustment (+/-) in amount charged made by Coal/Lignite Company	INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	Handling, Sampling and such other similar charges	INR	24426254.85	22330479.44	0.00	0.00	0.00	16886278.46	21164663.28	0.00	0.00	0.00	18002280.16	9361334.46	0.00	0.00	68647285.92
11	Total amount Charged (8+9+10)	INR	286147977.60	219939195.29	0.00	0.00	0.00	398498518.40	430353300.28	0.00	0.00	0.00	273599530.44	124354336.30	0.00	0.00	645634631.13
D)	TRANSPORATION																
12	Transportation charges by rail/ship/road transport																
	By Rail	INR	109406226.60	133330647.24	0.00	0.00	0.00	162823677.84	275373524.26	0.00	0.00	0.00	109241360.52	76000266.76	0.00	0.00	0.00
	By Road	INR	0.00	43060825.50	0.00	0.00	0.00	0.00	89166110.00	0.00	0.00	0.00	0.00	24634742.00	0.00	0.00	0.00
	By Ship	INR	228619125.00	162909254.34	0.00	0.00	0.00	345299850.00	337336414.80	0.00	0.00	0.00	229931100.00	93199036.56	0.00	0.00	0.00
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	Demurrage/Wharfage Charges, if any	INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12783323.00
15	Cost of Diesel in transporting coal through MGR system, if applicable																
16	Total Transportation Charges (12 +13 +14 + 15)	INR	338025351.60	339300727.08	0.00	0.00	0.00	508123527.84	701876049.06	0.00	0.00	0.00	339172460.52	193834045.32	0.00	0.00	12783323.00

17	Total amount Charged for Coal/Lignite supplied including Transportation (11+16)	INR	624173329	558239922.37	0.00	0.00	0.00	906622046	1132229349.34	0.00	0.00	0.00	612771991	318188381.62	0.00	0.00	658417954.13
E)	**TOTAL COST**																
18	Landed Cost of Coal/Lignite (2+17/(1+7)	INR/MT	4281.48	4215.0263	0.00	0.00	0.00	4202.35	4171.67	0.00	0.00	0.00	4220.35	4185.07	0.00	0.00	8675.05
19	Blending Ratio (Domestic/Import) (Including Biomass)	%	50.51	49.49	0.00	0.00	0.00	50.53	49.47	0.00	0.00	0.00	35.15	43.51	0.00	0.00	21.34
19 a	Blending Ratio (Domestic/Import) (Excluding Biomass)																
20	**Weighted Average Landed Cost of Coal (Including Biomass)**	INR/MT	**4248.59**					**4187.18**					**5155.58**				
20 a	**Weighted Average Landed Cost of Coal (Excluding Biomass)**																
F)	**QUALITY**																
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	kCal/kg	3700.00	3250.00	0.00	0.00		3700.00	3250.00	0.00	0.00		3700.00	3250.00	0.00	0.00	
22	GCV of Domestic Coal supplied as per bill of Coal Company	kCal/kg	3700.00	3250.00	0.00	0.00		3700.00	3250.00	0.00	0.00		3700.00	3250.00	0.00	0.00	
23	GCV of Imported Coal of the opening coal stock as per bill of Coal Company	kCal/kg					0.00					0.00					0.00
24	GCV of Imported Coal supplied as per bill of Coal Company	kCal/kg					0.00					0.00					5800.00
24 A	Weighted Average GCV of coal as Billed	kCal/kg	3700.00	3250.00	0.00	0.00	0.00	3700.00	3250.00	0.00	0.00	0.00	3700.00	3250.00	0.00	0.00	5800.00
25	Weighted Average GCV of coal as Billed (Including Biomass)	kCal/kg	3477					3477					3952				
	Weighted Average GCV of coal as Billed (Excluding Biomass)	kCal/kg															
26	GCV of Domestic Coal of the opening stock as received at Station	kCal/kg	3290	2974	0	0		3298	2979	0	0		3321	2992	0	0	
27	GCV of Domestic Coal supplied as received at Station	kCal/kg	3309	2987	0	0		3332	2997	0	0		3343	2965	0	0	
28	GCV of Imported Coal of the opening stock as received at Station	kCal/kg					0					0					0
29	GCV of Imported Coal supplied as received at Station	kCal/kg					0					0					3945
29 A	Weighted Average GCV of coal as Received	kCal/kg	3298	2979	0	0	0	3321	2992	0	0	0	3332	2985	0	0	3945
30	Weighted Average GCV of coal as Received (Including Biomass)	kCal/kg	3141					3158					3312				
30 a	Weighted Average GCV of coal as Received (Excluding Biomass)																
31	**Weighted Average GCV of coal as Received (Including Biomass) (S.N.30 - 85 kCal/kg)**	kCal/kg	**3056**					**3073**					**3227**				
31 a	**Weighted Average GCV of coal as Received (Excluding Biomass) (S.N.30 - 85 kCal/kg)**																

PETITIONER

S.N	PARTICULARS	UNIT	Jul-23					Aug-23					Sep-23				
			DOMESTIC COAL				IMPORT COAL	DOMESTIC COAL				IMPORT COAL	DOMESTIC COAL				IMPORT COAL
			MCL (RAW)	TALABIRA	LIGNITE	ECL		MCL (RAW)	TALABIRA	LIGNITE	ECL		MCL (RAW)	TALABIRA	LIGNITE	ECL	
A)	**OPENING QUANTITY**																
1	Opening Quantity of Coal/Lignite	MT	172953.86	145753.15	0.00	0.00	0.00	181444.68	168393.78	0.00	0.00	0.00	93422.68	159874.78	0.00	0.00	35599.00
2	Value of Stock	INR	732778258.08	610939296.14	0.00	0.00	0.00	773012600.47	708233813.22	0.00	0.00	0.00	398010616.60	683367759.17	0.00	0.00	247076077.92
B	**QUANTITY**																
3	Quantity of Coal/Lignite supplied by Coal/Lignite Company	MT	149273.00	145297.00	0.00	0.00	0.00	0.00	78905.00	0.00	0.00	73171.00	151850.00	150307.00	0.00	0.00	75175.00
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	MT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	Coal/Lignite supplied by Coal/Lignite supply Company(3+4)	MT	149273.00	145297.00	0.00	0.00	0.00	0.00	78905.00	0.00	0.00	73171.00	151850.00	150307.00	0.00	0.00	75175.00
6	Normative Transit & Handling Losses (For Coal/Lignite based Projects)	MT	1194.18	1162.38	0.00	0.00	0.00	0.00	631.24	0.00	0.00	146.34	1214.80	1202.46	0.00	0.00	150.35
7	Net Coal/Lignite Supplied (5-6)	MT	148078.82	144134.62	0.00	0.00	0.00	0.00	78273.76	0.00	0.00	73024.66	150635.20	149104.54	0.00	0.00	75024.65
C)	**PRICE**																
8	Amount charged by the Coal/Lignite Company	INR	268909338.58	219293856.16	0.00	0.00	0.00	0.00	118920881.70	0.00	0.00	420183297.00	259651352.00	226384888.05	0.00	0.00	449547278.00
9	Adjustment (+/-) in amount charged made by Coal/Lignite Company	INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	Handling, Sampling and such other similar charges	INR	18774617.39	18274635.39	0.00	0.00	0.00	0.00	25913650.89	0.00	0.00	74347470.85	11876689.14	11652375.43	0.00	0.00	58427066.07
11	Total amount Charged (8+9+10)	INR	287683955.97	237568491.55	0.00	0.00	0.00	0.00	144834532.59	0.00	0.00	494530767.85	271528041.14	238037263.48	0.00	0.00	507974344.07
D)	**TRANSPORATION**																
12	Transportation charges by rail/ship/road transport																
	By Rail	INR	111889069.88	145183668.34	0.00	0.00	0.00	0.00	78812681.15	0.00	0.00	0.00	112039485.50	150173226.77	0.00	0.00	0.00
	By Road	INR	0.00	47148876.50	0.00	0.00	0.00	0.00	25604672.50	0.00	0.00	0.00	0.00	48774621.50	0.00	0.00	0.00
	By Ship	INR	235104975.00	178375315.02	0.00	0.00	0.00	0.00	96868512.30	0.00	0.00	0.00	239163750.00	184525891.62	0.00	0.00	0.00
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	Demurrage/Wharfage Charges, if any	INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12299387.00	0.00	0.00	0.00	0.00	12636243.00
15	Cost of Diesel in transporting coal through MGR system, if applicable																
16	Total Transportation Charges (12 +13 +14 + 15)	INR	346994044.88	370707859.86	0.00	0.00	0.00	0.00	201285865.95	0.00	0.00	12299387.00	351203235.50	383473739.89	0.00	0.00	12636243.00
17	Total amount Charged for Coal/Lignite supplied including Transportation (11+16)	INR	634678000.85	608276351.41	0.00	0.00	0.00	0.00	346120398.54	0.00	0.00	506830154.85	622731276.64	621511003.37	0.00	0.00	520610587.07
E)	**TOTAL COST**																

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18	Landed Cost of Coal/Lignite (2+17/(1+7)	INR/MT	4259 55	4205.82	0 00	0.00	0.00	4260.32	4274.39	0.00	0.00	6940.53	4182 38	4223.19	0 00	0.00	6939 63
19	Blending Ratio (Domestic/Import) (Including Biomass)	%	53 47	46 53	0.00	0.00	0.00	41 47	40.89	0.00	0.00	17 63	42.04	41.27	0 00	0.00	16.69
19 a	Blending Ratio (Domestic/Import) (Excluding Biomass)																
20	**Weighted Average Landed Cost of Coal (Including Biomass)**	INR/MT	**4234.55**					**4738.69**					**4659.37**				
20 a	**Weighted Average Landed Cost of Coal (Excluding Biomass)**																
F)	**QUALITY**																
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	kCal/kg	3700.00	3250 00	0.00	0.00		3700.00	3250.00	0.00	0.00		3700.00	3250.00	0.00	0.00	
22	GCV of Domestic Coal supplied as per bill of Coal Company	kCal/kg	3700.00	3250.00	0 00	0.00		0.00	3250.00	0 00	0.00		3700.00	3250.00	0 00	0.00	
23	GCV of Imported Coal of the opening coal stock as per bill of Coal Company	kCal/kg					0 00					0.00					5800.00
24	GCV of Imported Coal supplied as per bill of Coal Company	kCal/kg					0 00					5800.00					5800.00
24 A	Weighted Average GCV of coal as Billed	kCal/kg	3700 00	3250 00	0 00	0 00	0.00	3700.00	3250.00	0.00	0.00	5800.00	3700.00	3250.00	0 00	0.00	5800.00
25	Weighted Average GCV of coal as Billed (Including Biomass)	kCal/kg	3491					3886					3865				
	Weighted Average GCV of coal as Billed (Excluding Biomass)	kCal/kg															
26	GCV of Domestic Coal of the opening stock as received at Station	kCal/kg	3332	2985	0	0		3362	3014	0	0		3362	2945	0	0	
27	GCV of Domestic Coal supplied as received at Station	kCal/kg	3398	3043	0	0		0	2796	0	0		3531	2969	0	0	
28	GCV of Imported Coal of the opening stock as received at Station	kCal/kg					0					0					5812
29	GCV of Imported Coal supplied as received at Station	kCal/kg					0					5812					5666
29 A	Weighted Average GCV of coal as Received	kCal/kg	3362	3014	0	0	0	3362	2945	0	0	5812	3467	2956	0	0	5713
30	Weighted Average GCV of coal as Received (Including Biomass)	kCal/kg	3200					3624					3631				
30 a	Weighted Average GCV of coal as Received (Excluding Biomass)																
31	**Weighted Average GCV of coal as Received (Including Biomass) (S.N.30 - 85 kCal/kg)**	kCal/kg	**3115**					**3539**					**3546**				
31 a	**Weighted Average GCV of coal as Received (Excluding Biomass) (S.N.30 - 85 kCal/kg)**																

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PETITIONER

S.N	PARTICULARS	UNIT	Oct-23					Nov-23					Dec-23				
			DOMESTIC COAL				IMPORT COAL	DOMESTIC COAL				IMPORT COAL	DOMESTIC COAL				IMPORT COAL
			MCL (RAW)	TALABIRA	LIGNITE	ECL		MCL (RAW)	TALABIRA	LIGNITE	ECL		MCL (RAW)	TALABIRA	BIOMASS	ECL	
A)	OPENING QUANTITY																
1	Opening Quantity of Coal/Lignite	MT	82343.88	150258.32	0.00	0.00	46434.65	104668.87	114843.32	0.00	0.00	2641.65	50174.60	219202.27	0.00	0.00	0.00
2	Value of Stock	INR	345781693.27	725848846.34	0.00	0.00	322239063.03	442182900.44	521952869.38	0.00	0.00	18964346.65	236756333.48	941460482.79	0.00	0.00	0.00
B	QUANTITY																
3	Quantity of Coal/Lignite supplied by Coal/Lignite Company	MT	223664.00	117165.00	0.00	0.00	72000.00	145784.00	276131.00	0.00	0.00	0.00	133255.00	211420.00	36.78	0.00	0.00
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	MT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	Coal/Lignite supplied by Coal/Lignite supply Company(3+4)	MT	223664.00	117165.00	0.00	0.00	72000.00	145784.00	276131.00	0.00	0.00	0.00	133255.00	211420.00	36.78	0.00	0.00
6	Normative Transit & Handling Losses (For Coal/Lignite based Projects)	MT	1789.31	937.32	0.00	0.00	144.00	1166.27	2209.05	0.00	0.00	0.00	1066.04	1691.36	0.29	0.00	0.00
7	Net Coal/Lignite Supplied (5-6)	MT	221874.69	116227.68	0.00	0.00	71856.00	144617.73	273921.95	0.00	0.00	0.00	132188.96	209728.64	36.49	0.00	0.00
C)	PRICE																
8	Amount charged by the Coal/Lignite Company	INR	401145857.28	177474512.10	0.00	0.00	457636917.00	238412237.92	420174736.15	0.00	0.00	0.00	227604870.20	322559265.60	504885.96	0.00	0.00
9	Adjustment (+/-) in amount charged made by Coal/Lignite Company	INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	Handling, Sampling and such other similar charges	INR	17227434.26	9025242.64	0.00	0.00	57227614.82	11228905.64	21269162.28	0.00	0.00	0.00	12083716.36	18917758.44	0.00	0.00	0.00
11	Total amount Charged (8+9+10)	INR	418373291.54	186499754.74	0.00	0.00	514864531.82	249641143.56	441443898.43	0.00	0.00	0.00	239688586.56	341477024.04	504885.96	0.00	0.00
D)	TRANSPORATION																
12	Transportation charges by rail/ship/road transport																
	By Rail	INR	168772381.12	116948244.75	0.00	0.00	0.00	108381656.96	275479330.76	0.00	0.00	0.00	99285635.40	211521481.60	0.00	0.00	0.00
	By Road	INR	0.00	38020042.50	0.00	0.00	0.00	0.00	89604509.50	0.00	0.00	0.00	0.00	68605790.00	0.00	0.00	0.00
	By Ship	INR	352270800.00	143838783.90	0.00	0.00	0.00	229609800.00	338994983.46	0.00	0.00	0.00	209876625.00	259551877.20	0.00	0.00	0.00
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	Demurrage/Wharfage Charges, if any	INR	0.00	0.00	0.00	0.00	12102552.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	Cost of Diesel in transporting coal through MGR system, if applicable																
16	Total Transportation Charges (12 +13 +14 + 15)	INR	521043181.12	298807071.15	0.00	0.00	12102552.00	337991456.96	704078823.72	0.00	0.00	0.00	309162260.40	539679148.80	0.00	0.00	0.00
17	Total amount Charged for Coal/Lignite supplied including Transportation (11+16)	INR	939416472.66	485306825.89	0.00	0.00	526967083.82	587632600.52	######## ######	0.00	0.00	0.00	548850846.96	881156172.84	504885.96	0.00	0.00
E)	TOTAL COST																

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18	Landed Cost of Coal/Lignite (2+17/(1+7)	INR/MT	4224.59	4544.91	0.00	0.00	7178.98	4131.05	4289.16	0.00	0.00	7178.98	4307.92	4249.21	13837.89	0.00	0.00
19	Blending Ratio (Domestic/import) (Including Biomass)	%	42.74	32.48	0.00	0.00	24.77	53.62	45.67	0.00	0.00	0.71	43.41	56.58	0.01	0.00	0.00
19 a	Blending Ratio (Domestic/Import) (Excluding Biomass)												43.41	56.59	-	0.00	0.00
20	**Weighted Average Landed Cost of Coal (Including Biomass)**	**INR/MT**	**5060.52**					**4224.934**					**4275.76**				
20 a	**Weighted Average Landed Cost of Coal (Excluding Biomass)**												**4274.70**				
F)	**QUALITY**																
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	kCal/kg	3700.00	3250.00	0.00	0.00		3700.00	3250.00	0.00	0.00		3700.00	3250.00	0.00	0.00	
22	GCV of Domestic Coal supplied as per bill of Coal Company	kCal/kg	3700.00	3250.00	0.00	0.00		3700.00	3250.00	0.00	0.00		3700.00	3250.00	3400.00	0.00	
23	GCV of Imported Coal of the opening coal stock as per bill of Coal Company	kCal/kg					5800.00					5800.00					0.00
24	GCV of Imported Coal supplied as per bill of Coal Company	kCal/kg					5800.00					0.00					0.00
24 A	Weighted Average GCV of coal as Billed	kCal/kg	3700.00	3250.00	0.00	0.00	5800.00	3700.00	3250.00	0.00	0.00	5800.00	3700.00	3250.00	3400.00	0.00	0.00
25	Weighted Average GCV of coal as Billed (Including Biomass)	kCal/kg	4074					3509					3445.35				
	Weighted Average GCV of coal as Billed (Excluding Biomass)	kCal/kg											3445.35				
26	GCV of Domestic Coal of the opening stock as received at Station	kCal/kg	3467	2956	0	0		3422	2846	0	0		3498	2855	0	0	
27	GCV of Domestic Coal supplied as received at Station	kCal/kg	3406	2704	0	0		3560	2858	0	0		3590	2709	3319	0	
28	GCV of Imported Coal of the opening stock as received at Station	kCal/kg					5713					5588					0
29	GCV of Imported Coal supplied as received at Station	kCal/kg					5508					0					0
29 A	Weighted Average GCV of coal as Received	kCal/kg	3422	2846	0	0	5588	3502	2855	0	0	5588	3565	2783	3319	0	0
30	Weighted Average GCV of coal as Received (Including Biomass)	kCal/kg	3772					3221					3123				
30 a	Weighted Average GCV of coal as Received (Excluding Biomass)												3123				
31	**Weighted Average GCV of coal as Received (Including Biomass) (S.N.30 - 85 kCal/kg)**	**kCal/kg**	**3687**					**3136**					**3038**				
31 a	**Weighted Average GCV of coal as Received (Excluding Biomass) (S.N.30 - 85 kCal/kg)**												**3038**				

Petitioner

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S.N	PARTICULARS	UNIT	Jan-24					Feb-24					Mar-24				
			DOMESTIC COAL		BIOMASS	DOMESTIC COAL	IMPORT COAL	DOMESTIC COAL		BIOMASS	DOMESTIC COAL	IMPORT COAL	DOMESTIC COAL		BIOMASS	DOMESTIC COAL	IMPORT COAL
			MCL (RAW)	TALABIRA		ECL		MCL (RAW)	TALABIRA		ECL		MCL (RAW)	TALABIRA		ECL	
A)	OPENING QUANTITY																
1	Opening Quantity of Coal/Lignite	MT	39483 56	242685.91	0.00	0.00	0 00	18900.56	284442.84	0.00	0 00	0.00	39467.03	305018.57	0 00	0 00	0 00
2	Value of Stock	INR	171328959 81	########## #####	0.00	0 00	0 00	80669223 35	########## #####	0 00	0 00	0.00	165970859.36	########## #####	0 00	0 00	0.00
B	QUANTITY																
3	Quantity of Coal/Lignite supplied by Coal/Lignite Company	MT	131661 00	229259.00	0.00	0 00	0 00	151692 00	207034.00	0 00	0 00	0.00	191675 00	71655.00	0 00	0 00	69500 00
4	Adjustment (+/) in quantity supplied made by Coal/Lignite Company	MT	0 00	0.00	0.00	0 00	0 00	0 00	0.00	0.00	0 00	0 00	0.00	0.00	0 00	0 00	0 00
5	Coal/Lignite supplied by Coal/Lignite supply Company(3+4)	MT	131661 00	229259 00	0.00	0 00	0 00	151692 00	207034.00	0.00	0 00	0 00	191675.00	71655.00	0 00	0 00	69500.00
6	Normative Transit & Handling Losses (For Coal/Lignite based Projects)	MT	1053 29	1834.07	0.00	0 00	0 00	1213 54	1656.27	0.00	0 00	0.00	1533.40	573.24	0 00	0.00	139 00
7	Net Coal/Lignite Supplied (5-6)	MT	130607 71	227424.93	0.00	0 00	0 00	150478 46	205377.73	0.00	0 00	0.00	190141.60	71081 76	0 00	0 00	69361 00
C)	PRICE																
8	Amount charged by the Coal/Lignite Company	INR	238391989 65	350383407.47	0.00	0 00	0 00	277079090.28	316623307.22	0.00	0 00	0.00	329067640.00	109619252.10	0 00	0 00	######## ######
9	Adjustment (+/) in amount charged made by Coal/Lignite Company	INR	0.00	0.00	0.00	0 00	0 00	0.00	0 00	0.00	0 00	0.00	0.00	0.00	0.00	0 00	0.00
10	Handling, Sampling and such other similar charges	INR	10841160 19	18876669.34	0.00	0 00	0 00	7124657 91	9724434 78	0.00	0 00	0 00	10082542.91	3769001.78	0.00	0.00	3655703 52
11	Total amount Charged (8+9+10)	INR	249233149.84	369260076.81	0.00	0 00	0 00	284203748 19	326347742.00	0 00	0 00	0 00	339150182.91	113388253.88	0 00	0.00	######## ######
D)	TRANSPORATION																
12	Transportation charges by rail/ship/road transport																
	By Rail	INR	98036097.21	229320899.93	0.00	0 00	0 00	112869466 44	206866302.46	0.00	0 00	0.00	142805542.00	71642102 10	0 00	0 00	0 00
	By Road	INR	0 00	235475428.66	0.00	0.00	0 00	0.00	129479063 60	0.00	0 00	0 00	0.00	44813037.00	0.00	0.00	0.00
	By Ship	INR	207366075.00	220061517.16	0.00	0 00	0 00	232088760.00	337734564.20	0 00	0 00	0.00	293262750.00	116890801 50	0.00	0 00	0 00
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	INR	0 00	0.00	0.00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0.00	0.00	0 00	0 00	0.00
14	Demurrage/Wharfage Charges, if any	INR	0 00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0 00	0.00	0.00	0.00	0 00	0 00	11682325 00
15	Cost of Diesel in transporting coal through MGR system, if applicable																
16	Total Transportation Charges (12 +13 +14 + 15)	INR	305402172 21	684857845.75	0.00	0.00	0.00	344958226 44	674079930 26	0 00	0 00	0 00	436068292.00	233345940 60	0 00	0 00	11682325 00
17	Total amount Charged for Coal/Lignite supplied including Transportation (11+16)	INR	554635322 05	########## #####	0.00	0 00	0 00	629161974 63	########## #####	0 00	0.00	0.00	775218474.91	346734194 48	0 00	0 00	######## ######
E)	TOTAL COST																

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S.N	PARTICULARS	UNIT	Jan-24					Feb-24					Mar-24				
			DOMESTIC COAL		BIOMASS	DOMESTIC COAL	IMPORT COAL	DOMESTIC COAL		BIOMASS	DOMESTIC COAL	IMPORT COAL	DOMESTIC COAL		BIOMASS	DOMESTIC COAL	IMPORT COAL
			MCL (RAW)	TALABIRA		ECL		MCL (RAW)	TALABIRA		ECL		MCL (RAW)	TALABIRA		ECL	
18	Landed Cost of Coal/Lignite (2+17/(1+7)	INR/MT	4268 09	4438 71	0.00	0 00	0 00	4190 79	4170 47	0.00	0.00	0.00	4099 10	4212.85	0.00	0.00	9609.31
19	Blending Ratio (Domestic/Import) (Including Biomass)	%	44 88	55 12	0.00	0 00	0 00	41 28	58 72	0.00	0.00	0.00	41 54	40 45	0.00	0.00	18 00
19 a	Blending Ratio (Domestic/Import) (Excluding Biomass)		44 88	55.12	-	0 00	0 00	41 28	58 72	-	0.00	0 00	41 54	40 45	-	0 00	18 00
20	**Weighted Average Landed Cost of Coal (Including Biomass)**	INR/MT	**4362.13**					**4178.86**					**5137.21**				
20 a	**Weighted Average Landed Cost of Coal (Excluding Biomass)**		**4362.13**					**4178.86**					**5137.21**				
F)	**QUALITY**																
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	kCal/kg	3700 00	3250.00	0.00	0 00		3700 00	3250.00	0.00	0.00		3700.00	3250.00	0.00	0.00	
22	GCV of Domestic Coal supplied as per bill of Coal Company	kCal/kg	3700.00	3250 00	0 00	0 00		3700 00	3250.00	0.00	0 00		3700 00	3250 00	0.00	0.00	
23	GCV of Imported Coal of the opening coal stock as per bill of Coal Company	kCal/kg					0 00					0 00					0 00
24	GCV of Imported Coal supplied as per bill of Coal Company	kCal/kg					0 00					0 00					5800 00
24 A	Weighted Average GCV of coal as Billed	kCal/kg	3700 00	3250.00	0.00	0.00	0.00	3700 00	3250.00	0.00	0.00	0.00	3700.00	3250.00	0.00	0.00	5800.00
25	Weighted Average GCV of coal as Billed (Including Biomass)	kCal/kg	3451.97					3435.76					3896.06				
	Weighted Average GCV of coal as Billed (Excluding Biomass)	kCal/kg	3451.97					3435.76					3896.06				
26	GCV of Domestic Coal of the opening stock as received at Station	kCal/kg	3565	2783	0	0		3614	2862	0	0		3345	2975	0	0	
27	GCV of Domestic Coal supplied as received at Station	kCal/kg	3628	2946	0	0		3311	3131	0	0		3439	2862	0	0	
28	GCV of Imported Coal of the opening stock as received at Station	kCal/kg					0					0					0
29	GCV of Imported Coal supplied as received at Station	kCal/kg					0					0					5735
29 A	Weighted Average GCV of coal as Received	kCal/kg	3614	2862	0	0	0	3345	2975	0	0	0	3423	2953	0	0	5735
30	Weighted Average GCV of coal as Received (Including Biomass)	kCal/kg	3199					3128					3649				
30 a	Weighted Average GCV of coal as Received (Excluding Biomass)		3199					3128					3649				
31	**Weighted Average GCV of coal as Received (Including Biomass) (S.N.30 - 85 kCal/kg)**	kCal/kg	**3114**					**3043**					**3564**				
31 a	**Weighted Average GCV of coal as Received (Excluding Biomass) (S.N.30 - 85 kCal/kg)**		**3114**					**3043**					**3564**				

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DETAILS OF SOURCEWISE FUEL FOR COMPUTATION OF ENERGY CHARGES

OIL

FORM 15

	Name of the Petitioner	NLC TAMILNADU POWER LTD
	Name of the Generating Station:	2X500MW - COAL BASED THERMAL POWER PLANT IN TUTICORIN
	Place (Region/District/State):	Southern/ Tuticorin/ Tamil Nadu

S. No.	Particulars	Unit	Apr-23		May-23		Jun-23	
			HFO	LDO	HFO	LDO	HFO	LDO
			A	B	A	B	A	B
1	Quantity of Oil Consumed for the month	KLit	110.07	4.00	141.67	15.00	164.00	12.26
2	Consumption value of Oil for the month	(Rs)	59,31,678.72	3,26,645.52	76,67,357.68	12,15,244.65	88,18,566.58	9,77,731.07
3	Landed Cost of Oil (2÷1)	(Rs/KLit)	53,888.63	81,661.38	54,122.52	81,016.31	53,773.11	79,730.17
4	Combined Weighted Average Landed Cost of Oil for HFO & LDO for the month [(A2+B2)÷(A1+B1)]	(Rs/KLit)		54,862.49		56,697.46		55,579.05
5	GCV of Oil as per bill of Oil Company	(kCal/Lit)	9690	9690	9690	9690	9689	10250
6	Combined Weighted average GCV of Oil as Billed	(kCal/Lit)		9,690		9,690		9,728
7	GCV of Oil as Received at Station	(kCal/Lit)	9774	10279	9684	10244	9724	10375
8	Combined Weighted average GCV of HFO & LDO as Received for the month	(kCal/Lit)		9,791		9,738		9,769

Note:

1. Similar details to be furnished for natural gas/liquid fuel for CCGT station and secondary fuel oil for LDO based thermal plants with appropriate units.
2. As billed and as received GCV, quantity of coal, and price should be submitted as certified by statutory auditor.
3. Details to be provided for each source separately. In case of more than one source, add additional column.
4. Break up of the amount charged by the Coal Company is to be provided separately.

PETITIONER

DETAILS OF SOURCEWISE FUEL FOR COMPUTATION OF ENERGY

	Name of the Petitioner	NLC TAMILNADU POWER LTD
	Name of the Generating Station:	2X500MW - COAL BASED THERMAL POWER PLANT IN TUTICORIN
	Place (Region/District/State):	Southern/ Tuticorin/ Tamil Nadu

S. No.	Particulars	Unit	Jul-23		Aug-23		Sep-23	
			HFO	LDO	HFO	LDO	HFO	LDO
			A	B	A	B	A	B
1	Quantity of Oil Consumed for the month	KLit	53.24	7.75	-	-	339.60	32.45
2	Consumption value of Oil for the month	(Rs)	28,56,525.92	6,10,545.03	-	-	1,87,85,428.89	26,24,550.96
3	Landed Cost of Oil (2÷1)	(Rs/KLit)	53,658.37	78,749.52	54,162.27	78,749.52	55,315.66	80,874.86
4	Combined Weighted Average Landed Cost of Oil for HFO & LDO for the month [(A2+B2)÷(A1+B1)]	(Rs/KLit)		56,848.02		56,110.32		57,545.02
5	GCV of Oil as per bill of Oil Company	(kCal/Lit)	9736	10152	9835	10152	9835	10152
6	Combined Weighted average GCV of Oil as Billed	(kCal/Lit)		9,788		9,860		9,863
7	GCV of Oil as Received at Station	(kCal/Lit)	9805	10200	9715	10200	9772	10261
8	Combined Weighted average GCV of HFO & LDO as Received for the month	(kCal/Lit)		9,855		9,753		9,814

Note:

1. Similar details to be furnished for natural gas/liquid fuel for CCGT station and secondary fuel oil for LDO based thermal plants with appropriate units.
2. As billed and as received GCV, quantity of coal, and price should be submitted as certified by statutory auditor.

DETAILS OF SOURCEWISE FUEL FOR COMPUTATION OF ENERGY

	Name of the Petitioner	NLC TAMILNADU POWER LTD
	Name of the Generating Station:	2X500MW - COAL BASED THERMAL POWER PLANT IN TUTICORIN
	Place (Region/District/State):	Southern/ Tuticorin/ Tamil Nadu

S. No.	Particulars	Unit	Oct-23		Nov-23		Dec-23	
			HFO	LDO	HFO	LDO	HFO	LDO
			A	B	A	B	A	B
1	Quantity of Oil Consumed for the month	KLit	-	-	79.58	10.80	243.75	51.90
2	Consumption value of Oil for the month	(Rs)	-	-	44,02,204.67	8,73,448.49	1,35,13,766.76	43,81,609.75
3	Landed Cost of Oil (2÷1)	(Rs/KLit)	55,315.66	80,874.86	55,315.66	80,874.86	55,441.09	84,424.08
4	Combined Weighted Average Landed Cost of Oil for HFO & LDO for the month [(A2+B2)÷(A1+B1)]	(Rs/KLit)		57,383.03		58,369.76		60,528.92
5	GCV of Oil as per bill of Oil Company	(kCal/Lit)	9835	10152	9835	10152	9762	10270
6	Combined Weighted average GCV of Oil as Billed	(kCal/Lit)		9,861		9,873		9,851
7	GCV of Oil as Received at Station	(kCal/Lit)	9772	10261	9772	10261	9762	10270
8	Combined Weighted average GCV of HFO & LDO as Received for the month	(kCal/Lit)		9,811		9,830		9,851

Note:

1. Similar details to be furnished for natural gas/liquid fuel for CCGT station and secondary fuel oil for LDO based thermal plants with appropriate units.
2. As billed and as received GCV, quantity of coal, and price should be submitted as certified by statutory auditor.

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DETAILS OF SOURCEWISE FUEL FOR COMPUTATION OF ENERGY

	Name of the Petitioner	NLC TAMILNADU POWER LTD
	Name of the Generating Station:	2X500MW - COAL BASED THERMAL POWER PLANT IN TUTICORIN
	Place (Region/District/State):	Southern/ Tuticorin/ Tamil Nadu

S. No.	Particulars	Unit	Jan-24		Feb-24		Mar-24	
			HFO	LDO	HFO	LDO	HFO	LDO
			A	B	A	B	A	B
1	Quantity of Oil Consumed for the month	KLit	60.21	10.00	-	-	59.90	13.00
2	Consumption value of Oil for the month	(Rs)	33,37,110.74	8,29,868.40	-	-	33,19,790.10	10,76,593.31
3	Landed Cost of Oil (2÷1)	(Rs/KLit)	55,426.06	82,986.84	-	-	55,426.06	82,814.87
4	Combined Weighted Average Landed Cost of Oil for HFO & LDO for the month [(A2+B2)÷(A1+B1)]	(Rs/KLit)		59,351.63		57,751.76		60,310.49
5	GCV of Oil as per bill of Oil Company	(kCal/Lit)	9807	10218	9807	10218	9807	10318
6	Combined Weighted average GCV of Oil as Billed	(kCal/Lit)		9,865		9,842		9,898
7	GCV of Oil as Received at Station	(kCal/Lit)	9807	10218	9807	10218	9807	10318
8	Combined Weighted average GCV of HFO & LDO as Received for the month	(kCal/Lit)		9,865		9,842		9,898

Note:

1. Similar details to be furnished for natural gas/liquid fuel for CCGT station and secondary fuel oil for LDO based thermal plants with appropriate units.
2. As billed and as received GCV, quantity of coal, and price should be submitted as certified by statutory auditor.

Petitioner

PART-I

FORM- 16

Details/Information to be Submitted in respect of Limestone for Computation of Energy Charge Rate

Name of the Petitioner NLC TAMILNADU POWER LTD

Name of the Generating Station 2X500MW - COAL BASED THERMAL PC

Sl. No.	Month	Unit	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
1	Quantity of Limestone supplied by Limestone supply Company	(MT)												
2	Adjustment (+/-) in quantity supplied made by Limestone supply Company	(MT)												
3	Limestone supplied by Limestone supply Company(1+2)	(MT)												
4	Net Limestone Supplied (3-4)	(MT)												
5	Amount charged by the Limestone supply Company	(Rs.)/tonne												
6	Adjustment (+/-) in amount charged made by Limestone supply Company	(Rs.)												
7	Total amount Charged (6+7)	(Rs.)												
8	Transportation charges by rail/ship/road transport	(Rs.)												
9	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)												
10	Demurrage Charges, if any	(Rs.)												
11	Total Transportation Charges (8+/-9-10)	(Rs.)												
12	Total amount Charged for Limestone supplied including Transportation (7+11)	(Rs.)												

(Petitioner)

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Details of Capital Spares

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

S. No.	Details of Capital Spares and Expenses			Claimed as a part of additional Capitalisation	Funded through compensatory allowance	Funded through Special allowance (If Applicable	Claimed as a part of stores and spares	Justification
	Name of spare	Amount in Rs. Lakh	Qty					
Will be submitted during true up								

(Petitioner)

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Details of Capital Spares

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

S. No.	Details of Capital Spares and Expenses			Claimed as a part of additional Capitalisation	Funded through compensatory allowance	Funded through Special allowance (If Applicable	Claimed as a part of stores and spares	
	Name of spare	Amount in Rs. Lakh	Qty					
Will be submitted during true up								

(Petitioner)

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Details of Capital Spares

Name of the Petitioner	NLC TAMILNADU POWER LIMITED							
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION							
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu							
S. No.	Details of Capital Spares and Expenses			Claimed as a part of additional Capitalisation	Funded through compensatory allowance	Funded through Special allowance (If Applicable	Claimed as a part of stores and spares	
	Name of spare	Amount in Rs. Lakh	Qty					
Will be submitted during true up								

(Petitioner)

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Details of Capital Spares

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

S. No.	Details of Capital Spares and Expenses			Claimed as a part of additional Capitalisation	Funded through compensatory allowance	Funded through Special allowance (If Applicable	Claimed as a part of stores and spares	
	Name of spare	Amount in Rs. Lakh	Qty					
Will be submitted during true up								

(Petitioner)

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Details of Capital Spares

Name of the Petitioner	NLC TAMILNADU POWER LIMITED							
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION							
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu							
S. No.	Details of Capital Spares and Expenses			Claimed as a part of additional Capitalisation	Funded through compensatory allowance	Funded through Special allowance (If Applicable	Claimed as a part of stores and spares	
	Name of spare	Amount in Rs. Lakh	Qty					
Will be submitted during true up								

(Petitioner)

FORM 18

Non-Tariff Income

Name of the Petitioner		NLC TAMILNADU POWER LIMITED					
Name of the Generating Station:		NTPL 2 x 500 MW THERMAL POWER STATION					
Place (Region/District/State):		Southern/Tuticorin/Tamil Nadu					
S. No.	**Parameters**	**Existing 2023-24**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
1.	Income from rent of land or buildings	0	Will be submitted during true up				
2.	Income from sale of scrap	0					
3.	Income from advertisements	0					
	NTI Sharing @50%		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Note: NTI has been shared with beneficiaries

(Petitioner)

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Details of Water Charges

PART 1

FORM 19

Name of the Petitioner	NLC TAMILNADU POWER LTD
Name of the Generating Station:	2X500MW - COAL BASED THERMAL POWER PLANT IN TUTICORIN
Place (Region/District/State):	Southern/ Tuticorin/ Tamil Nadu

S. No.	Details of Water charges (excluding water cess)		Quantity allocated*		Normative consumption at 85% PLF	Rate specified (as per govt. notification or agreement)**	Spillage of water (in percentage)		Amount Claimed
	Name of source and quantity	Amount (Rs in Lakhs)	Cu.m/Year		Cu.m/Year	Rs/Cu.m	Cu.m/ Year	%	
	2024-25								
1	Consent fee to Tamilnadu Pollution Control Board								28.22
2	Water Consent Fee								
3	Electricity charges for booster pump station								
4	Other Expenses								
	Total								**28.22**
	2025-26								
1	Consent fee to Tamilnadu Pollution Control Board								29.63
2	Water Consent Fee								
3	Electricity charges for booster pump station								
4	Other Expenses								
	Total								**29.63**
	2026-27								
1	Consent fee to Tamilnadu Pollution Control Board								31.11
2	Water Consent Fee								
3	Electricity charges for booster pump station								
4	Other Expenses								
	Total								**31.11**
	2027-28								
1	Consent fee to Tamilnadu Pollution Control Board								32.67
2	Water Consent Fee								
3	Electricity charges for booster pump station								
4	Other Expenses								
	Total								**32.67**
	2028-29								
1	Consent fee to Tamilnadu Pollution Control Board								34.30
2	Water Consent Fee								
3	Electricity charges for booster pump station								
4	Other Expenses								
	Total								**34.30**

* Other Expense is related to water analysis charges

(Petitioner)

Actual water charges for FY 2023-24 has been considered and escalated at 5% for projection for Tariff 2024-29. Actual water charges will be subm
Truing up

PART 1
FORM 20

Details of Statutory Charges

Name of the Petitioner	NLC TAMILNADU POWER LIMITED				
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION				
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu				
Particulars	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
Boiler License Fee					
Air Consent Fee					
Factory License	Will be claimed at the time of truing up				
Wireless License fee					
Spectrum Charges					
PESO Class C					
PESO Class B					
TOTAL	-	-	-	-	-

*** Other Statutory Charges paid in relation to Plant Operation may be provided**
Supporting Challans to be provided

(Petitioner)

Abstract of Capital Cost Estimates and Schedule of Commissioning for the New Projects			PART 1 FORM- A
Name of the Petitioner	**NLC TAMILNADU POWER LIMITED**		
Name of the Generating Station:	**NTPL 2 x 500 MW THERMAL POWER STATION**		
Place (Region/District/State):	**Southern/Tuticorin/Tamil Nadu**		
New Projects **Capital Cost Estimates**			
Board of Director/ Agency approving the Capital cost			
Date of approval of the Capital cost estimates:			
Price level of approved estimates			
Foreign Exchange rate considered for the Capital cost estimates		Not Applicable	
Capital Cost excluding IDC, IEDC & FC (Rs. Lakh)			
Foreign Component, if any (In Million US $ or the relevant			
Domestic Component (Rs. Lakh)			
Capital cost excluding IDC, IEDC, FC, FERV & Hedging Cost			
IDC, IEDC,FC, FERV & Hedging Cost			
Foreign Component, if any (In Million US $ or the relevant			
Domestic Component (Rs. Lakh)			
Total IDC, IEDC, FC, FERV & Hedging Cost (Rs. Lakh)			
Rate of taxes & duties considered			
Capital cost Including IDC, IEDC, FC, FERV & Hedging Cost			
Foreign Component, if any (In Million US $ or the relevant Currency)			
Domestic Component (Rs. Lakh)			
Capital cost Including IDC, IEDC& FC (Rs. Lakh)			
Schedule of Commissioning			
Scheduled COD of Unit-I/Block-I as per Investment Approval			
Scheduled COD of Unit-II/Block-II as per Investment Approval			
Scheduled COD of Unit-III/Block-IIII as per Investment Approval			
Scheduled COD of last Unit/Block			

Note:

(Petitioner)

Break-up of Capital Cost for New Coal/Lignite based projects								PART 1 FORM- B
Name of the Petitioner	NLC TAMILNADU POWER LIMITED							
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION							
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu							
								(Amount in Rs. Lakh)
S. No.	**Break Down**	**As per Original Estimates as per Investment Approval**	**Capital Expenditure as on COD**	**Undischarge Liabilities correspondin g to (5)**	**Capital Expenditure upto COD o (Cash Basis)**	**Variatio n (3-4-5-6)**	**Specific Reasons for Variation**	**Estimated Capital expenditure upto Cut-off dat**
1	2	3	4	5	6	7	8	9
			Not Applicable					

(Petitioner)

Break-up of Capital Cost for Gas/Liquid fuel based projects	PART I FORM- C

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/ Tuticorin/ Tamil Nadu

(Amount in Rs. Lakh)

S. No.	Break Down	As per Original Estimates as per Investment Approval	Actual Capital Expenditure	Liabilities/ Provisions	Variation (3 – 4 - 5)	Specific Reasons for Variation*	Actual/Estimated Capital Expenditure upto Cut-off date
1	2	3	4	5	6	7	8
1	**Cost of Land & Site Development**						
1.1	Land*						
1.2	Rehabilitation & Resettlement (R&R)						
1.3	Preliminary Investigation & Site						
	Total Land & Site Development						
2.0	Plant & Equipment	Not Applicable					
2.1	Steam Generator Island						
2.2	Turbine Generator Island						
2.3	WHRB Island						
2.4	BOP Mechanical						
2.4.1	Fuel Handling & Storage system						
2.4.2	External water supply system						
2.4.3	CW system						
2.4.4	Cooling Towers						
2.4.5	DM water Plant						
2.4.6	Clarification plant						
1.0	2	3	4	5	6	7	8
2.4.7	Chlorination Plant						
2.4.8	Air Condition & Ventilation System						
2.4.9	Fire fighting System						
40213.0	HP/LP Piping						
	Total BOP Mechanical						
2.5	BOP Electrical						
2.5.1	Switch Yard Package						
2.5.2	Transformers Package						
2.5.3	Switch gear Package						
2.5.4	Cables, Cable facilities & grounding						
2.5.5	Lighting						
2.5.6	Emergency D.G. set						
	Total BOP Electrical						
2.6	**Control & Instrumentation (C & I)**						
	Total Plant & Equipment excluding taxes						
2.7	Taxes & Duties						
3.0	Initial Spares						
4.0	Civil Works						
4.1	Main plant/Adm. Building						
4.2	External Water Supply System						
4.3	CW system						
4.4	Cooling Towers						
4.5	DM water Plant						
4.6	Clarification plant						
4.7	Fuel handling & Storage system						
4.8	Township & Colony						
4.9	Temp. construction & enabling works						
4.1	Road & Drainage						
4.1	Fire fighting System						
	Total Civil works						
5.0	**Construction & Pre- Commissioning**						
5.1	Erection Testing and commissioning						
5.2	Site supervision						
5.3	Operator's Training						
5.4	Construction Insurance						
5.5	Tools & Plant						
5.6	Startup fuel						
	Total Construction & Pre-						
6.0	Overheads						
6.1	Establishment						
6.2	Design & Engineering						
6.3	Audit & Accounts						
6.4	Contingency						
	Total Overheads						
7.0	Capital cost excluding IDC & FC						
8.0	IDC, FC, FERV &Hedging Cost						
8.1	Interest During Construction (IDC)						
8.2	Financing Charges (FC)						
8.3	Foreign Exchange Rate Variation (FERV)						
8.4	Hedging Cost						
	Total of IDC, FC,FERV & Hedging Cost						
9	**Capital cost including IDC, FC, FERV & Hedging Cost**						

Provide details of Freehold land and Lease hold land separately

Note:

2. In case of time & cost overrun, a detailed note giving reasons of such time and cost over run should be submitted clearly bringing out the agency responsible and whether
3. The implication on cost due to time over run, if any shall be submitted separately giving details of increase in prices in different packages from scheduled COD to
4. Impact on account of each reason for Time over run on Cost of project should be quantified and substantiated with necessary documents and supporting

(Petitioner)

Break-up of Construction/Supply/Service packages		PART 1 FORM- D
Name of the Petitioner	NLC TAMILNADU POWER LIMITED	
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION	
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu	

(Amount in Rs. Lakh) [1]

S. No.	Name/No. of Construction / Supply / Service Package	Package 1	Package 2	Other packages	Total Cost of all packages
1	Scope of works[1] (in line with head of cost break-ups as applicable)				
2	Whether awarded through ICB/DCB/ Departmentally/ Deposit Work				
3	No. of bids received				
4	Date of Award				
5	Date of Start of work				
6	Date of Completion of Work/Expected date of completion of work		Not Applicable		
7	Value of Award[2] in (Rs. Lakh)				
8	Firm or With Escalation in prices				
9	Actual capital expenditure till the completion or up to COD whichever is earlier(Rs.Lakh)				
10	Taxes & Duties and IEDC (Rs. Lakh)				
11	IDC, FC, FERV & Hedging cost (Rs. Lakh)				
12	Sub -total (9+10+11) (Rs. Lakh)				

Note:

(Petitioner)

Details of variables, parameters, optional package etc. for New Project		PART 1 FORM- E
Name of the Petitioner		NLC TAMILNADU POWER LIMITED
Name of the Generating Station:		NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):		Southern/Tuticorin/Tamil Nadu
Unit Size		
Number of Units		
Greenfield/Extension		
S. No.	**Variables**	**Not Applicable**
1	Coal Quality - Calorific Value	
2	Ash Content	
3	Moisture Content	
4	Boiler Efficiency	
5	Suspended Particulate Matter	
6	Ash Utilization	
7	Boiler Configuration	
8	Turbine Heat Rate	
9	CW Temperature	
10	Water Source	
11	Distance of Water Source	
12	Clarifier	
13	Mode of Unloading Oil	
14	Coal handling Mechanism	
15	Type of Fly Ash Disposal and Distance	
16	Type of Bottom Ash Disposal and Distance	
17	Type of Soil	
18	Foundation Type (Chimney)	
19	Water Table	
20	Seismic and Wind Zone	
21	Condensate Cooling Method	
22	Desalination/RO Plant	
23	Evacuation Voltage Level	
24	Type of Coal (Domestic/Imported)	
Parameter/Variables		
Completion Schedule		
Terms of Payment		
Performance Guarantee Liability		
Basis of Price (Firm/Escalation-Linked)		
Equipment Supplier (Country of Origin)		
Optional Packages		
Desalination Plant/RO Plant		
MGR		
Railway Siding		
Unloading Equipment at Jetty		
Rolling Stock/Locomotive		
FGD Plant		
Length of Transmission Line till Tie Point (in km)		

(Petitioner)

Detail of cost over run — PART I, FORM- F

	Name of the Petitioner	NLC TAMILNADU POWER LIMITED						
	Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION						
	Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu						
S. No.	Break Down	As per Original Estimates as per Investment Approval	Original Cost (Rs. Lakh) as approved by the Board of Members	Actual/ Estimated Cost as incurred/to be incurred (Rs. Lakh)	Difference	Reasons for Variation (Please submit supporting computations and documents wherever applicable)		Increase in soft cost due to increase in hard cost
1	2	3	4	5	6=4-5			
1	**Cost of Land & Site Development**							
1.1	Land*							
1.2	Rehabilitation & Resettlement							
1.3	Preliminary Investigation & Site		Not Applicable					
	Total Land & Site Development							
2.0	Plant & Equipment							
2.1	Steam Generator Island							
2.2	Turbine Generator Island							
	Total Plant & Equipment							
2.3	BOP Mechanical							
2.3.1	External water supply system							
2.3.2	CW system							
2.3.3	DM water Plant							
2.3.4	Clarification plant							
2.3.5	Chlorination Plant							
2.3.6	Fuel Handling & Storage system							
2.3.7	Ash Handling System							
2.3.8	Coal Handling Plant							
2.3.9	Rolling Stock and Locomotives							
2.3.10	MGR							
2.3.11	Air Compresser System							
2.3.12	Air Condition & Ventilation System							
2.3.13	Fire fighting System							
2.3.14	HP/LP Piping							
2.3.15	FGD system, if any							
2.3.16	De-salination plant for sea-water							
2.3.17	External coal handling in Jetty, if							
2.3.18	Tri Flu Ash Chimney							
2.3.19	Hydrogen Generation Plant							
2.3.20	Inter Plant Communication System							
2.3.21	Mechanical and electrical Workshop							
	Total BOP Mechanical							
2.4	BOP Electrical							
2.4.1	Switch Yard Package							
2.4.2	Transformers Package							
2.4.3	Switch gear Package							
2.4.4	Cables, Cable facilities &							
2.4.5	Lighting							
2.4.6	Emergency D.G. set							
	Total BOP Electrical							
2.5	**Control & Instrumentation (C & I)**							
2.5.1	Total Plant & Equipment excluding taxes & Duties							
2.6	Taxes & Duties							
3.0	Initial Spares							
4.0	Civil Works							
4.1	Main plant/Adm. Building							
4.2	CW system							
4.3	Cooling Towers							
4.4	DM water Plant							
4.5	Clarification plant							
4.6	Chlorination plant							
4.7	Fuel handling & Storage system							
4.8	Coal Handling Plant							
4.9	MGR & Marshalling Yard							
4.10*	Ash Handling System							
4.11	Ash disposal area development							
4.12	Fire fighting System							
4.13	Township & Colony							
4.14	Temp. construction & enabling							
4.25	**Road & Drainage**							
4.26	**Tri Flu Ash Chimney**							
4.27	Hydrogen Generation Plant							
4.28	**External water supply system**							
4.29	**Switch Yard Package**							
4.30*	Mechanical and electrical Workshop							
4.31	Railway Siding							
4.32	Green Belt within Plant Boundary							
4.33	Rain Water Harvesting							
4.34	Raw water intake system excluding cross overs							
4.35	One time water charges							
4.36	Other Civil Work							
4.37	Computer and peripherals							
4.38	Furniture and Office Equipment							
	Total Civil works							
5.0	**Construction & Pre-**							
5.1	Erection Testing and							
5.2	Site supervision							
5.3	Operator's Training							
5.4	Construction Insurance							
5.5	Tools & Plant							
5.6	Startup fuel							
5.7	Construction Water							
5.8	Construction Power							
5.9	**Infirm Power Sales**							
	Total Construction & Pre-							
6.0	Overheads							
6.1	Establishment							
6.2	Design & Engineering							
6.3	Audit & Accounts							
6.4	Contingency							
6.5	CER Expenses							
6.6	Transmission Charges							
6.7	Other Overheads							
	Total Overheads							
7.0	**Total Capital cost excluding IDC**							
8.0	IDC, FC, FERV & Hedging Cost							
8.1	Interest During Construction (IDC)							
8.2	Financing Charges (FC)							
8.3	Foreign Exchange Rate Variation							
8.4	Hedging Cost							
	Total of IDC, FC,FERV & Hedging							
9.0	**Capital cost including IDC, FC,**							

*Audited details of Leasehold and Lease hold land

Note: Impact on account of each increase for Cost overrun should be quantified and substantiated with necessary documents and supporting workings

(Petitioner)

Detail of time over run									PART 1 FORM- G
Name of the Petitioner	NLC TAMILNADU POWER LIMITED								
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION								
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu								
S. No	Description of Activity / Works / Service	Original Schedule (As per Planning)		Actual Schedule (As per Actual)		Time Over-Run	Reasons for delay		Other Activity affected (Mention S. No. of activity affected)
		Start Date	Completion Date	Actual Start Date	Actual Completion Date	Days			
1									
2									
3									
4									
5				Not Applicable					
6									
7									
8									

1. Delay on account of each reason in case of time overrun should be quantified and substantiated with necessary documents and supporting workings.
2. Indicate the activities on critical path.

(Petitioner)

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Statement of Additional Capitalisation during five year before the end of useful life of the Project		PART 1 FORM- H
Name of the Petitioner	NLC TAMILNADU POWER LIMITED	
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION	
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu	

(Amount in Rs. Lakh)

S. No.	Year	Work / Equipment added during last five years of useful life of each Unit/Station	ACE Claimed (Actual / Projected)				Regulations under which claimed	Justification	Impact on life extension
			Accrual basis	Un- discharged Liability included in col. 4	Cash basis	IDC included in col. 4			
1	2	3	4	5	(6 = 4 - 5)	7	8	9	10
		Not Applicable							

Note:

1. Cost Benefit analysis for capital additions done should be submitted along with petition for approval of such schemes
2. Justification for additional capital expenditure claim for each asset should be relevant to regulations under which claim has been made and the necessity of capitalization of the asset.

(Petitioner)

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Details of Assets De-capitalized during the period		PART 1 FORM- I
Name of the Petitioner	NLC TAMILNADU POWER LIMITED	
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION	
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu	

(Amount in Rs. Lakh)

S. No.	Name of the Asset	Nature of de-capitlization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of de-capitalization	Whether earning RoE at the normal rate of weightage average rate of interest on loan
1	DELL LATITUDE 3510(80028)	Additional Capital Expenditure	0.60	Mar-21	0.57	
2	Asus PRO P5440FA-BM0581R i5/SSD	Additional Capital Expenditure	0.60	Mar-21	0.57	
3	DELL Latitude3510(80028)	Additional Capital Expenditure	0.60	Mar-21	0.57	
4	HP348 G7 i5/SATA	Additional Capital Expenditure	0.60	May-21	0.55	
5	HP-HP 348G7 I5/SSD ARUN S CPF 47821	Additional Capital Expenditure	0.48	Mar-22	0.46	
6	HP 348 G7 i5 / SSD	Additional Capital Expenditure	0.50	Apr-22	0.32	
7	ASUS Pro P5440FA-BM0581R i5 / SSD	Additional Capital Expenditure	0.58	Dec-22	0.31	
8	HP ProBook 450 G7 i5 / SSD	Additional Capital Expenditure	0.65	Dec-22	0.35	
9	HP / HP 14DV2014TU	Additional Capital Expenditure	0.60	Nov-23	0.08	
	Total		**5.21**		**3.79**	

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(Petitioner)

Details of Assets De-capitalized during the period		PART 1 FORM- I
Name of the Petitioner	NLC TAMILNADU POWER LIMITED	
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION	
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu	

(Amount in Rs. Lakh)

S. No.	Name of the Asset	Nature of de-capitlization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of de-capitalization	Whether earning RoE at the normal rate of weightage average rate of interest on loan
1						
2						
3						
4						
5						
	Total		0		0	

(Petitioner)

Details of Assets De-capitalized during the period			PART 1 FORM- I
	Name of the Petitioner	NLC TAMILNADU POWER LIMITED	
	Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION	
	Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu	

(Amount in Rs. Lakh)

S. No.	Name of the Asset	Nature of de-capitlization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of de-capitalization	Whether earning RoE at the normal rate of weightage average rate of interest on loan
1					0	
2					0	
3					0	
4					0	
5					0	
	Total		**0**		**0**	

(Petitioner)

Details of Assets De-capitalized during the period

PART 1
FORM- I

	Name of the Petitioner	NLC TAMILNADU POWER LIMITED
	Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
	Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

(Amount in Rs. Lakh)

S. No.	Name of the Asset	Nature of de-capitlization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of de-capitalization	Whether earning RoE at the normal rate of weightage average rate of interest on loan
1					0	
	Total		**0**		**0**	

(Petitioner)

Details of Assets De-capitalized during the period		PART 1 FORM- I
Name of the Petitioner	NLC TAMILNADU POWER LIMITED	
Name of the Generating	NTPL 2 x 500 MW THERMAL POWER STATION	
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu	

(Amount in Rs. Lakh)

S. No.	Name of the Asset	Nature of de-capitlization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of de-capitalization	Whether earning RoE at the normal rate of weightage average rate of interest on loan
1					0	
	Total		0		0	

(Petitioner)

Reconciliation of capitalisation claimed vis-à-vis books						PART 1 FORM- I
Name of the Petitioner		NLC TAMILNADU POWER LIMITED				
Name of the Generating Station:		NTPL 2 x 500 MW THERMAL POWER STATION				
Place (Region/District/State):		Southern/Tuticorin/Tamil Nadu				
						(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	Closing Gross Block as per IND AS	**Will be submitted during true up**				
2	Add/Less: Adjustments*					
3	Closing Gross Block as per IGAAP					
4	Opening Gross Block as per IND AS					
5	Add/Less: Adjustments*					
6	Opening Gross Block as per IGAAP					
7	**Total Additions as per books (G = 3 - 6)**					
8	Less: Exclusions (Form K)					
9	**Net Additions pertaining to instant project/Unit/Stage**					
11	**Net Additional Capital Expenditure Claimed (on accrual basis)**					
12	**Less: Un-discharged Liabilities (as per IGAAP)**					
13	**Add: Discharges of un-discharged liabilities, corresponding to admitted assets/works (as per**					
14	**Net Additional Capital Expenditure Claimed (on**					

Note: (1) Form is to be certified by the Auditor and Certificate issued as per the guidelines prescribed by their governing body.
(2) Reason for exclusion of any expenditure shall be given in Clear terms. *Break-up to be specified.

(Petitioner)

Statement showing items/assets/works claimed under Exclusions:		PART 1 FORM- K
Name of the Petitioner	NLC TAMILNADU POWER LIMITED	
Name of the Generating	NTPL 2 x 500 MW THERMAL POWER STATION	
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu	

(Amount in Rs. Lakh)

S. No.	Head of Work / Equipment	ACE Claimed under Exclusion				Justification	Justification
		Accrual basis	Un- discharged Liability included in col. 3	Cash basis	IDC included in col. 3		
1	2	3	4	(5 = 3 – 4)	6	7	7
Will be submitted during true up							

(Petitioner)

Statement of Capital cost (To be given for relevant dates and year wise)		PART I FORM-1
Name of the Petitioner	NLC TAMILNADU POWER LIMITED	
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION	
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu	

(Amount in Rs. Lakh)

S. No.	Particulars	As on COD			
		Accrual Basis	Un-discharged	Cash Basis	
A	a) Opening Gross Block Amount 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 Gross Block Amount during the period (Direct purchases)				
	b) Amount of IDC in B(a) above				
	c) Amount of FC in B(a) above				
	d) Amount of FERV in B(a) above			Not	
	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	0.00	0.00	0.00	
	b) Amount of IDC in E(a) above	0.00		0	
	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				

Note:

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

(Petitioner)

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

PART 1
FORM- M

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

(Amount in Rs.

S. No.	Particulars	As on relevant date		
		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			
	FBHE Modification Works	0.00	0	0.00
	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			
		Will be submitted during true up		
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			
	FBHE Modification Works	0.00	0	0.00
	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			

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

(Petitioner)

PART 1
FORM- N

Calculation of Interest on Normative Loan

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

Fig Rs in Lakhs

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	*4,25,668.54*	4,26,894.70	4,28,216.81	4,30,883.88	4,40,473.74	4,40,473.74
2	Cumulative repayment of Normative loan up to previous year	*2,33,206.67*	2,65,040.59	2,96,997.07	3,29,102.63	3,61,666.24	3,94,588.24
3	**Net Normative loan – Opening**	*1,92,461.86*	1,61,854.11	1,31,219.74	1,01,781.26	78,807.50	45,885.51
4	Add: Increase due to addition during the year / period	*1,293.40*	743.65	136.50	9,589.86	-	-
5	Less: Decrease due to de-capitalisation during the year / period	*125.85*	3.65	-	-	-	-
6	Less: Decrease due to repayment during the year / period	*31,833.92*	31,956.48	32,105.56	32,563.61	32,922.00	32,922.00
7	Add: Increase due to discharges during the year / period	*58.62*	582.10	2,530.58	-	-	-
8	**Net Normative loan - Closing**	*1,61,854.11*	1,31,219.74	1,01,781.26	78,807.50	45,885.51	12,963.51
9	**Average Normative loan**	*1,77,157.99*	1,46,536.92	1,16,500.50	90,294.38	62,346.51	29,424.51
10	Weighted average rate of interest	*8.67%*	8.67%	8.67%	8.67%	8.67%	8.67%
11	**Interest on Loan**	*15,364.87*	12,709.11	10,104.06	7,831.21	5,407.30	2,551.98

(Petitioner)

PART 1
FORM- O

Calculation of Interest on Working Capital

	Name of the Petitioner	NLC TAMILNADU POWER LIMITED
	Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
	Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

(Amount in Rs Lakh)

S. No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	4	5	6	7	8
1	Cost of Coal/Lignite[1]	33,229.18	33,229.18	33,229.18	33,229.18	33,229.18
2	Cost of Main Secondary FuelOil [1]	359.08	359.08	359.08	360.06	359.08
3	Fuel Cost[2] (Lime Stone)	-	-	-	-	-
4	Liquid Fuel Stock[2]					
5	O & M Expenses	2,458.94	2,587.85	2,723.07	2,865.48	3,015.08
6	Maintenance Spares	5,901.46	6,210.83	6,535.37	6,877.14	7,236.20
7	Receivables	46,594.02	46,506.59	46,540.63	46,500.45	46,415.94
8	**Total Working Capital**	**88,542.68**	**88,893.53**	**89,387.33**	**89,832.31**	**90,255.48**
9	Rate of Interest	11.90%	11.90%	11.90%	11.90%	11.90%
10	Interest on Working Capital	10,536.58	10,578.33	10,637.09	10,690.04	10,740.40

Note:

1. For Coal based/Lignite based generating stations
2. For Gas Turbine/Combined Cycle generating stations duly taking into account the annual mode of operation (last available) on gas fuel and liquid fuel

(Petitioner)

Incidental Expenditure up to SCOD and up to Actual/ anticipated COD		PART 1 FORM- P
Name of the Petitioner	NLC TAMILNADU POWER LIMITED	
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION	
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu	

(Amount in Rs. Lakh)

S. No.	Parameters	As on Scheduled COD	As on actual COD/anticipated COD
A	Head of Expenses:		
1	Employees' Benefits Expenses		
2	Finance Costs		
3	Water Charges		Not Applicable
4	Communication Expenses		
5	Power Charges		
6	Depreciation		
7	Other Office and Administrative Expenses		
8	Others (Please Specify Details)		
9	Other Pre-Operating Expenses		
...	.....		
...	.....		
B	Total Expenses		
	Less: Income from sale of tenders		
	Less: Income from guest house		
	Less: Income recovered from Contractors		
	Less: Interest on Deposits		
	.....		

(Petitioner)

Expenditure under different packages up to SCOD and up to Actual/anticipated COD	PART 1 FORM- Q

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

(Amount in Rs. Lakh)

S. No.	Parameters	As on Scheduled COD	As on actual/anticipated COD
1	Package 1		
2	Package 2		
3	Package 3		Not Applicable
4	----------		
5	----------		
6			

(Petitioner)

Actual cash expenditure	PART 1 FORM- R

Name of the Petitioner	NLC TAMILNADU POWER LIMITED
Name of the Generating Station:	NTPL 2 x 500 MW THERMAL POWER STATION
Place (Region/District/State):	Southern/Tuticorin/Tamil Nadu

(Amount in Rs. Lakh)

Particulars	Quarter-I	Quarter-II	Quarter-III	Quarter-n / DOCO
Actual cash expenditure upto Mar-23				
Payment to contractors / suppliers towards capital assets				
Add: Expenditure towards CWIP		**Not Applicable**		
Add: Capital Advances, if any				
Less: Un-discharged liabilities (included above)				
Add/Less: Others				
Payment to contractors / suppliers towards capital assets				
Cumulative payments				

Note: If there is variation between payment and fund deployment justification need to be furnished

(Petitioner)

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Statement of Liability Flow											PART 1 FORM- S
Name of the Petitioner	NLC TAMILNADU POWER LIMITED										
Name of the Generating	NTPL 2 x 500 MW THERMAL POWER STATION										
Place (Region/District/State):	NLC India Limited										
Party	**Asset / Work**	**Year of actual capitalisation**	**Original Liability**	**Liability as on 31.03.2024**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**Reversal**	**Closing as on 31.03.2029**
a) For assets eligible for normal RoE											
BHEL	Main Plant Package (Boiler,	2015-16		2,846.20		2,846.2					-
L&T	Coal Handling System	2015-16		16.15	16.15						-
Energo Engineering	Ash Handling System	2015-16		610.29							610.29
Gammon India Ltd	RCC Chimney	2015-16		50.59	50.59						-
Gammon India Ltd	Natural Drought Cooling Tower	2015-16		1,101.91	333.00	768.91					-
L&T	Switch Yard	2015-16		227.42	227.42						-
ABB Ltd	Power Transformers	2015-16		4.22	4.22						-
Airoxnigen Equipments Pvt	Hydrogen Plant	2015-16		13.44	13.44						-
Mather & Platt	Fire Protection System	2015-16		32.61	32.61						-
Deetech Pvt Ltd	Storm Water Pumping	2015-16		13.52	13.52						-
Jyoti Ltd	Circulating Water Make up	2015-16		136.01	136.01						-
TRF Ltd	Shore Unloader	2015-16		95.31							95.31
Others	Other Packages	2015-16		4.62	4.62						-
				5,152.29	831.58	3,615.11	-	-	-	-	705.60
b) For assets eligible for RoE at weightage average rate of interest on loan											
		NIL									

(Petitioner)

ANNEXURE II

SUPPORTING DOCUMENTS FOR

ADDITIONAL CAPITAL EXPENDITURE

Form 9(25-27) - Design, Supply, Erection, testing & Commissioning of Complete dry ash pressure conveying System

NTPL - ASH HANDLING SYSTEM AUGMENTATION (1/3)

SCOPE OF WORK

Design, Supply, Erection, Testing and Commissioning of complete Dry ash pressure conveying system for Augmentation of Ash handling system at NTPL

TECHNICAL JUSTIFICATION

1. NTPL - Ash Handling System (TA3 Package) was designed by envisaging the design coal for Steam Generators as below.

Type of Coal	GCV Kcal/kg	Average Ash%
Indigenous washed coal from MCL 70 to 85%	3700	36
Imported coal 15 to 30%	5900	5

The design data given for capacity of Fly Ash removal system considering 8 hours of ash collection in ESP hoppers to be evacuated in 6 hours is 180 Tons/Hr/Unit. Ash conveying capacity per Unit (3x6x180) – 3240 Tons/day as per design calculations.

2. **TA3 Package Status - Ash Handling Plant**

The contract for NTPL Ash Handling Plant & Auxiliaries package (TA-3) was awarded to M/s Energo Engineering Projects Ltd, New Delhi, at a contract price of Rs.59.94 Cr as per LOA No: CO/CONTS/0023M/NTPL/TTPP/TA-3/2008 dt: 08.04.2010 for design, engineering, manufacture, supply, erection, commissioning, conducting PG test and handing over of the complete package. Unit-1 Ash handling system was provisionally taken over on 17.12.2015 with a list of pending punch points and Unit-2 Ash handling system on 03.06.2016 with a list of pending punch points. But the firm had not proved the design capacity of Ash Handling Plant as the PG test had failed and the same could not be completed. Already the LDBG for a value of Rs 4.93 Cr and the CPG for a value of Rs 5.99 Cr were encashed. Total amount encashed is Rs 10.92 Cr Meanwhile, National Company Law Tribunal (NCLT) declared the firm M/s Energo Engineering Projects Ltd as insolvent. After provisional take over, Ash Handling Plant was stabilized by NTPL with outsourced contracts for pending works on back chargeable basis and the present capacity of Ash Handling Plant is 2250 Tons of ash per day per unit. Ash handling system has been running smoothly with this capacity for the designed coal combination of 70% Indigenous coal & 30% ECL/Imported coal.

3. Ash evacuation issues in Ash Handling System

NLCIL has been allotted Talabira coal mines with NTPL as one of the end user plants. subsequently, Coal India has stopped the supply of ECL coal to NTPL. Also, due to various guidelines issued by Government of India, procurement of import coal became very difficult. Due to these reasons, ECL coal availability became nil & import coal availability is only intermittent.

With the existing Fly ash evacuation and conveying system, the entire fly ash generated from the Boiler could not be handled and conveyed out to the fly ash silos from ESP hoppers, especially during the domestic coal firing with an ash content of more than 50%. There is total of 3504 Tons /day of ash per each unit is excepted while using 100% Talabira mines coal. As the capacity of ash conveying is only 2250 tons/day for each unit, the enormous quantity of excess ash is getting collected and dumped inside the ESP hoppers and subsequently respective fields are not functioning.

Due to high ash content in indigenous coal, and stacking of ash in Unit-1 ESP led to Unit-1 C pass C3 and C4 first hoppers collapsed on 21.05.23 and then Unit 1 was managed with three passes till stopping the Unit for Major Overhaul on 19.07.23.

To manage this situation, the ESP hoppers are manually unloaded through the spool piece, down to the ESP floors, and loaded to the tippers with JCBs and transported to the Ash dykes, to manage the unit to run with full load capacity. These works are carried out every day to avoid any breakdown, loss of generation or any abnormal occurrence which may happen while the design hopper storage capacity exceeds beyond the permissible limit of ESP hoppers.

Furthermore, in the absence of imported coal, when NTPL boilers are fuelled by MCL and Talabira coal, the ash conveying capacity is limited to 2250 tons per day for each unit, restricting the declared capacity (DC) to 300 MW.

Loss due to restricted DC: NTPL Partial loss due to ash evacuation issue during the FY 2023-24 is 1618.709 MU and corresponding fixed cost under recovery is ₹ 218.49 Crore

Hence, it is proposed to augment the existing Ash handling system by considering 436 T of Talabira coal firing for 500 MW power generation.

The Technical system requirements of the proposed system is furnished below.

1. **Stage1**: Dry fly ash handling system for 16 Nos of hoppers in First rows of ESP, 4 Nos of Hoppers of APH & 4 Nos of Hoppers of Duct of both units to the new Intermediate silo of 2x150 MT capacity in MS Construction. ECO ash has to be conveyed to slag bath with flushing apparatus system.
2. **Stage2**: From the bottom of each proposed fly ash intermediate silo, Transport vessels shall be provided. Fly ash from this intermediate ash silo shall be carried to the Proposed 2x1500 MT fly ash silo using a Pressure Conveying System using compressed air.
3. **Utilities:**
    1. Conveying Air system for stage 1.
    2. Transport Air system for stage 2.
    3. Instrument Air system
4. **Electricals:_** 11 KV HT incomer power supply would be provided up-to proposed MCC room from the existing source
5. **Control & Instrumentation**: A PLC based control facility for the new proposed system would be provided which would be controlled from the existing AHP control facility
6. **Civil & Structural Work:** A compressor cum Electrical cum control building for housing the compressors and HT switchboard, LT MCC, PLC system etc., Intermediate Fly ash silo of capacity 2 x 150 MT of Steel construction complete with supporting structures, Foundation of pipe rack, 2 Nos Fly ash silo of 1500 MT and control room for Silo.
7. **Ventilation and Air Conditioning:_**Ventilation system for compressor cum Electrical cum control building room. Air conditioning system for control room
8. **Erection:** Installation, erection, testing, commissioning and performance guarantee testing and handing over of the plant in complete shape

Form 9 Add Cap (2024-25)
Construction of protective shed inside TTPS Plant area (1/6)

: TAMILNADU GENERATION AND DISTRIBUTION CORPORATION LIMITED:

From
Er.Justin Jagadeep Kumar,B.E., M.Tech.(Distn.),B.O.E.,M.I.E,
Chief Engineer,(FAC)
Tuticorin Thermal Power Station,
Tuticorin.

To
The Chief Executive Officer,
NTPL Ltd.,
Harbour Estate,
Tuticorin – 628 004.
Email: ceo.ntpl@nlcindia.in

HOD/C
DCE/SS

Lr.No.CE/TTPS/SE/Operation/ Sy.O/F.13/D.No. 52 /2024,Dt. 04.04.2024.

Sir,

Sub: TTPS – Unsafe condition due to falling of damaged Concrete blocks/ Chemical water spray from NTPL Cooling Tower – I inside TTPS premises - Remedial measures – Regarding.

Ref: 1) Lr.No.CE/TTPS/SE/R&M/ Sy.O/F.13/D.No.106 /2023, dt.24 .07.2023.
2) Lr.No.CE/TTPS/SE/R&M/ Sy.O/F.13/D.No.123 /2023,dt.26.09.2023.
3) NTPL Letter No: 860/CEO/NTPL/NDCT/Spalling/ 2023
4) NTPL Letter No: 905/CEO/NTPL/NDCT/Spalling/ 2024

***

With reference to the 4th cited above, the proposal given by NTPL with design drawing is studied at this end and the following remarks are communicated herewith.

1) The length of the proposed shed is 50 x 11 meter in size. It is not sufficient to prevent the spalling concrete from NTPL cooling tower- I. Already wind barriers were constructed to the entire length of nearly 90 meters to avoid spraying of chemical dozed water. The proposed shed has to be provided in line with the length of 90 meter wind barrier.
2) In the proposal MS sheet roofing has been proposed. The sheets are prone to be exposed to corrosive chemical dozed water and will get damaged and eroded within short period. Hence as an alternative non asbestos sheet with fiber material may be used.
3) As already communicated vide our letter in reference (3) cited, the future maintenance has to be borne by M/s. NTPL may also be taken into account while completing the proposed protective shed.

...2

GM/CIVIL,FED

06/4/24

CEO/NTPL
No: 8868
Dt: 6.4.24

(216)

4) During the inspection the wind barriers already constructed along the cooling tower -I is found corroded/eroded and dilapidated damaged condition. It may collapse at any time. Hence it is requested that, the above wind barrier structure shall be dismantled immediately to safeguard the men and materials of TTPS. Also the damaged compound wall portions have to be replaced and repairing works in the compound to be carried out urgently.

5) It is requested that the water leakage and flooding from the NTPL compound wall area in to TTPS area shall also be attended to safeguard existing civil structures.

After getting reply, final confirmation will be given. Further it is requested that, the work may be taken up and completed at earliest (i.e., before the forthcoming windy season) to ensure the safety of our employees.

Chief Engineer (FAC)
Tuticorin Thermal Power Station,
Tuticorin- 628 004.

Copy submitted to the Director / Generation/ TANGEDCO, Chennai for kind information please.

Copy to the Superintending Engineer / Operation / Factory Manager/ TTPS for follow-up.

Copy to the Superintending Engineer / Civil / TTPS for follow-up.

(3/6) By speed post

NLC TAMILNADU POWER LIMITED

एनएलसी तमिलनाडु पावर लिमिटेड

(A JVC of NLC India Ltd & TANGEDCO and a subsidiary of NLC India Lt

OFFICE OF THE CHIEF EXECUTIVE OFFICER

मुख्य कार्यकारी अधिकारी का कार्यालय

NTPL

2 X 500 मेगावाट संयुक्त उद्यम ताप विद्युत परियोजना 2 X 500 MW JV Thermal Power Project,
हारबर इस्टेट, टुटिकोरिन Harbour Estate, Tuticorin- 628004

CIN: U40102TN2005GOI058050

Fax: 0461-2352480 Phone: 0461-2352844 E-mail: ceo.ntpl@nlcindia.in Web: www.ntplpower.com

Lr No. 905 / CEO/NTPL/ NDCT/ Spalling /2024 Dt 08.02.2024

To

The Chief Engineer,
Tuticorin Thermal Power Station,
TANGEDCO,
Tuticorin-4

Email: cettps@tnebnet.org

Sir,

Sub : NTPL- Cooling Tower No.1 (NDCT-1) adjacent to TTPS main entrance road – Spalling & falling of damaged concrete/debris on TTPS roadside from NDCT shell structure – Unsafe condition and construction of shed at TTPS entrance road - Structural drawings for shed - Reg

Ref :- Lr No. CE/TTPS/SE/R&M/Sy. O/F13/D no. 142/ 2023 dt 03.11.2023

In order to give protection from falling debris from NDCT -1 on TTPS side, various options were put forth by NTPL vide our letter No. 860/CEO/NTPL/NDCT/Spalling/2023 dt 04.10.2023. Among the various options suggested to TTPS, the proposal of construction of protective shed with plate roofing at the entrance of TTPS has been accepted vide ref letter dated 03.11.2023.

It is proposed to construct a protective shed of size 50 x 11 meters across the entrance road and the structural drawing for the proposed shed, as designed by our civil design office/NLCIL is enclosed herewith. It is requested that the drawing may be reviewed/ vetted at your end so that estimation/tendering can be proceeded by NTPL.

Thanking you,

Yours faithfully.
for NLC Tamilnadu Power Ltd

Thamarajan 10/2/24
Chief Executive Officer

328

BYRPAD/BYSPEED POST

128

(4/6)

Speed post.

NLC TAMILNADU POWER LIMITED

एनएलसी तमिलनाडु पावर लिमिटेड

(A JVC of NLC India Ltd & TANGEDCO and a subsidiary of NLC India Li

OFFICE OF THE CHIEF EXECUTIVE OFFICER

मुख्य कार्यकारी अधिकारी का कार्यालय

NTPL

2 X 500 मेगावाट संयुक्त उद्यम ताप विद्युत परियोजना 2 X 500 MW JV Thermal Power Project,

हारबर इस्टेट, टुटिकोरिन Harbour Estate, Tuticorin- 628004

CIN: U40102TN2005GOI058050

Fax: 0461-2352480 Phone: 0461-2352844 E-mail: ceo.ntpl@nlcindia.in Web: www.ntplpower.com

Lr No. 860/ CEO/NTPL/ NDCT/ Spalling /2023 Dt 04.10.2023

To

The Chief Engineer,
Tuticorin Thermal Power Station,
TANGEDCO,
Tuticorin-4

Email: cettps@tnebnet.org

Sir,

Sub : NTPL- Cooling Tower No.1 (NDCT-1) adjacent to TTPS main entrance road – Spalling & falling of damaged concrete/debris on TTPS roadside from NDCT shell structure – Unsafe condition and Remedial Measures - Further Course of Actions to be Taken - Reg

Ref :- Lr No. CE/TTPS/SE/R&M/Sy. O/F13/D no. 123/ 2023 dt 26.09.2023

This is in continuation of letter cited in ref. It is unfortunate that such an incident has happened. NTPL is committed to safety of all workers/Employees, including those working in TTPS. We wish to inform that the following permanent control measures are already initiated in this regard by NTPL.

1. The onset of spalling/falling of concrete debris is due to severe corrosive environment prevailing at sea facing high rise structures like NDCT which also has to handle sea water. In order to find the extent of corrosion & attend the repair of affected portions of shell structure, testing such as Carbonation depth, Half-cell potential, RCPT , UPV have been already conducted and the tendering proposal is under process to undertake the repair works . The proposal envisages erection of winches around cooling tower shell which provide access to undertake such repairs. It takes about 6 months' time to complete the repair.
2. The distance between NDCT-1 and TTPS Main entrance road is hardly about 15 meters (sketch enclosed). Therefore, it poses risk of falling debris from high rise structure even while undertaking repair works of shell.
3. Considering the proximity of TTPS main entrance road and NDCT -1 and to avoid such unsafe incidents, the following remedial measures are suggested for consideration. As the work area falls entirely on TTPS side, TTPS is requested to review the following options.

...2/-

OPTIONS PROPOSED	WORKS TO BE DONE	TIMELINE	PROS/CONS
Option- 1: Permanent Diversion of Entrance Road from main gate around North side of TTPS Stores area	Introducing a Gate and formation of new Road through A to B to connect with existing BT road.	2 months	1. Utmost safety is ensured permanently. 2. The proposed area is free from any obstruction for formation of road. 3. Workers to travel extra distance
Option- 2: Permanent Diversion of Entrance Road through the south side of stores shed	Formation of new road along C to D on the south side of stores. Stores to be provided with new fencing to safe guard the stores area	3 months	1. Utmost safety is ensured permanently. 2. No extra distance for travel 3. Electrical items to be shifted for forming the road
Option- 3: Construction of protective arch structure with plate roofing at the TTPS main entrance road.	Civil foundations, structural steel fabrication, plate roofing, protection with anti-corrosive painting. The structure acts as a barrier from falling debris.	6 months	1. No extra distance for travel 2. Till completion of work, the risk of falling debris. 3. The construction activities of arch interfere with daily movement of men and materials of TTPS.

It is requested to review the above proposal and to inform accordingly for further course of action.

Thanking you,

Yours faithfully.

For NLC Tamilnadu Power Ltd

Chief Executive Officer 04/10/21

(6/6)

: TAMILNADU GENERATION AND DISTRIBUTION CORPORATION LIMITED:

From
Er.Justin Jagadeep Kumar,B.E.,
M.Tech.(Distn.),B.O.E.,M.I.E,
Chief Engineer,(FAC)
Tuticorin Thermal Power Station,
Tuticorin.

To
The Chief Executive Officer,
NTPL Ltd.,
Harbour Estate,
Tuticorin – 628 004.
Email: ceo.ntpl@nlcindia.in

Lr.No.CE/TTPS/SE/R&M/ Sy.O/F.13/D.No. 123 /2023.Dt. 26.09.2023.

Sir,

Sub: TTPS – Unsafe condition due to falling of damaged Concrete blocks from NTPL Cooling tower – Requesting for take permanent control measures – Regarding.

***

On 22.09.2023 @ 02.00 Hrs, heavy damaged concrete blocks had fallen down at TTPS campus entry road from NTPL cooling tower. Luckily during that time no one was present there and any untoward incident happened. However if this happened on daytime, it is apprehended that persons may got injured and vehicles may got damaged. It is felt very much unsafe for men and material using the main gate of TTPS.

Hence, it is requested that suitable permanent safety measures may be made at your end immediately.

Kumar 26.09.23

Chief Engineer (FAC)
Tuticorin Thermal Power Station,
Tuticorin- 628 004.

Copy submitted to the Director / Generation/ TANGEDCO, Chennai for kind information please.

Copy to Superintending Engineer / R&M (M) / Factory Manager/ TTPS for follow-up.

GM/Civil, F&D
for urgent action & suitable reply & discussion.
V.Ramanujam 27/9/23

27/9/23

CMC
DC(S)

PL expedite the proposal for repair works
27/9

CEO/NTPL
No: 7936
Dt: 27.9.23

Form 9 Add cap (2024-25) C12

Supply, Installation, Commissioning of CCTV Surveillance (1/2)

OFFICE OF THE ASSTT. COMMANDANT / सहायक कमाण्डेंट का कार्यालय
CENTRAL INDUSTRIAL SECURITY FORCE / केन्द्रीय औद्योगिक सुरक्षा बल
(MINISTRY OF HOME AFFAIRS) / (गृह मंत्रालय)
केऔसुब इकाई एनटीपीएल
तूतीकोरिन, तमिलनाडु

No. IC-17099/CISF/NTPL/CIW/Security Corres/2022-9692 DATED: 05/12/2022

To,

The CEO,
NTPL Tuticorin

SUB : STRENGTHENING OF PERIMETER SECURITY AT NTPL TUTICORIN: REG

It is intimated that during the perimeter surveillance of NTPL Tuticorin, the under mentioned shortcomings in perimeter security were noticed which are required to be rectified on priority basis.

- Due to fallen of bricks in the perimeter wall, holes have been developed in some places in the southern side perimeter wall. The holes are required to be plugged / filled.
- Due to high rise of wild bushes, visibility of perimeter wall is being obstructed from inside as well as outside of the plant. Thus, the bushes are required to be cleared.
- Perimeter Fencing at the Cooling Tower-II area and near TTPS area adjacent to abandoned Gammon shed found damaged / cut. Fencing at that area should be erected / replaced.
- Street light from the Cooling tower area to Crusher house as well as rear gate to silo are not turning on. The same should be rectified.
- No CCTV Cameras have been installed at the perimeter wall. Hence CCTV Cameras should be installed at the perimeter wall and CCTV monitoring to be provided to CISF for effective monitoring.

02. Hence you are hereby requested to accord necessary direction to the concerned official of NTPL to do the needful at the earliest.

NTPL HR DEPARTMENT
No: 3127
Date: 5/12/22

To
Submitted to DGM/CS
Sir, Perimeter Security is in scope of CSI CCTV project

सहायक कमाण्डेंट
ASSISTANT COMMANDANT
केऔसुब इकाई एनटीपीएल तूतीकोरिन
CISF UNIT NTPL TUTICORIN

Copy to,
1. The DGM/HR, NTPL (T) : For kind information.

To
Shri. Personnel AO/Security for compliance for the remarks of CM/HR.
8/12

Submitted to DGM/HOHR
S. Manickam
DGM/CS&C

CM(HR)
6/12/2022

AEM/HR
Sir
Copy of the letter may be given for civil and Electrical [illegible]

एनएलसी इंडिया लिमिटेड NLC India Limited
(नवरत्न- भारत सरकार का एक उद्यम) ('Navratna' – Government of India Enterprise)
मुख्य सतर्कता अधिकारी का कार्यालय Office of the Chief Vigilance Officer
(आईएसओ 9001:2015) (ISO 9001:2015)
जे-26, जे.एन.सलै, ब्लॉक-8, नेयवेली-607801, तमिलनाडु, भारत J-26, J.N Salai, Block-8, Neyveli-607801, Tamilnadu, India
☎ 04142-250326 🖷 04142-250327 CIN:L93090TN1956GOI003507 ✉cgm.vig@nlcindia.in 🌐www.nlcindia.in

Lr.No. 706/VO-NTPL/Vig/2023 Dt.20.09.2023

To
The Chief Executive Officer,
NLC Tamilnadu Power Limited,
Harbour Estate,
Tuticorin – 628 004.

Sir,

Sub: Vigilance – Study on CCTVs– Certain Systemic Improvements - Reg.,

*****

Based on a Study in the functioning and healthiness of the Closed Circuit Television (CCTV) and Video Management System at NTPL and NTPL Township premises, the following systemic improvements are suggested for implementation.

1.0 Presently, 40 % of BHEL CCTVs (126 Nos.), the power source is taken from Lighting supply. In order to ensure 24/7 operation and continuous surveillance, these source of power supply shall be modified to an alternative uninterrupted source immediately.

2.0 As CCTVs are not provided in the areas like Cooling Towers - North side, Vehicle stand, CHS Watch Tower area etc., security assessment may be conducted at the NTPL Power Plant in collaboration with CISF to identify potentially vulnerable areas. Increasing surveillance in these areas can help improve overall security and discourage potential theft.

3.0 As a need of day, advanced surveillance cameras with features of 'Face Detection' and 'Automatic Number Plate Recognition' will be provided at

a. Main Gate and East Gate of NTPL Power Plant
b. NTPL Township Entrance (Main Gate)

which will help in tracking down the Criminals and identifying the Vehicles.

4.0 Presently the periphery of the NTPL Township alone coved under CCTV. Apart from existing periphery, CCTV surveillance within the NTPL township is essential. Since the current system lacks essential features, for better security monitoring, upgrading the current surveillance system to State-of-the-art technology in NTPL Township is necessary.

This letter is issued with the approval of CVO.

Action Taken Report (Action plan with time frame) shall be communicated to the Vigilance Department or before 30.09.2023.

20/9/23

Chief General Manager/ Vigilance
NLC India Ltd., Neyveli

ANNEXURE III

TARIFF ORDER 2019-24

IN 254/GT/2020 DATED 01.08.2024

CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 254/GT/2020

Coram:
Shri Jishnu Barua, Chairperson
Shri Arun Goyal, Member
Shri Ramesh Babu V, Member

Date of Order: 1st August, 2024

In the matter of:

Petition for approval of tariff for NLC Tamil Nadu Power Limited (1000 MW) for the period 2019-24.

And

In the matter of:

NLC India Limited,
Neyveli House, 135, EVR Periyar Road,
Kilpauk, Chennai - 600010 **...Petitioner**

Vs

1. Tamil Nadu Generation and Distribution Corporation Limited,
   NPKRR Maaligai, 144, Anna Salai, Chennai – 600002.

2. Transmission Corporation of Andhra Pradesh,
   Vidyut Soudha, Gunadala, Eluru Road,
   Vijaywada, Andhra Pradesh – 520004.

3. Southern Power Distribution Company of Andhra Pradesh Limited,
   D. No: 19-13-65/A, Srinivasapuram, Tiruchhanur Road,
   Kesavayanagunta, Tirupati (AP) – 517501

4. Eastern Power Distribution Company of Andhra Pradesh Limited,
   Corporate Office P&T Colony, Seethammadhara,
   Visakhapatnam (AP) – 530013

5. Transmission Corporation of Telangana Limited,
   Vidyut Soudha Khairatabad, Hyderabad – 500082

6. Northern Power Distribution Company of Telangana Limited,
   H.No 1-1-504, Opp. NIT petrol pump, Chaityanarayani colony,
   Hanamkonda, Warangal (Telangana) – 506001

7. Southern Power Distribution Company of Telangana Limited,
   2nd Floor, H.No. 6-1-50, Mint Compound, Hyderabad – 500063

8. Power Company of Karnataka Limited,
   KPTCL Complex, Kaveri Bhawan, Bangalore – 560009

9. Bangalore Electricity Supply Company Ltd,
   Krishna Rajendra Circle, Bangalore – 560001

10. Mangalore Electricity Supply Company Limited,
    Paradigm Plaza A.B Shetty circle, Mangalore – 560009

11. Chamundeshwari Electricity Supply Company Limited,
    Corporate Office No. 927, L.J Avenue, New Kantharaj Urs Road,
    Saraswathipuram, Mysore – 570009

12. Gulbarga Electricity Supply Company Limited,
    Main Road, Gulbarga, Karnataka – 585102

13. Hubli Electricity Supply Company Limited,
    PB.Road, Navanagar, Hubli – 580025

14. Kerala State Electricity Board,
    Vaidyuthi Bhavanam, Pattom
    Thiruvananthpuram – 695004

15. Puducherry Electricity Department,
    137, NSC Bose Salai, Puducherry – 605001 **...Respondents**

Parties present:

Ms. Anushree Bardhan, Advocate, NTPL
Ms. Surbhi Kapoor, Advocate, NTPL
Shri S. Vallinayagam, Advocate, TANGEDCO

ORDER

This Petition has been filed by the Petitioner for the determination of tariff of NLC Tamil Nadu Power Limited (2 x 500 MW) (in short, "the generating station/ project") for the period 2019-24, in accordance with Regulation 9(2) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (in short "the 2019 Tariff Regulations"). The generating station, with a capacity of 1000 MW, comprises two units of 500 MW each. The date of commercial operation of Unit-I is 18.6.2015, and that of Unit-II and the generating station, as a whole, is 29.8.2015.

2. The Commission vide its order dated 21.6.2024 in Petition No. 528/GT/2020 had determined the capital cost and the annual fixed charges for the generating station for the period 2015-19, after truing up exercise, as under:

Capital Cost allowed

(Rs. in lakh)

	2015-16		2016-17	2017-18	2018-19
	As on 18.6.2015 (COD of Unit-I)	As on 29.8.2015 (COD of Unit-II/ generating Station)			
Opening capital cost	**246119.82**	**524531.92**	**539732.66**	**566316.36**	**590889.08**
Add: Additional capital expenditure	-	17447.53	27257.02	27403.45	9546.83
Less: Excess initial spares	-	57.31	673.32	1124.33	-
Less: Post COD overhead expenditure (*Revenue expenditure in nature*) in cash as per Form 5B not allowed in "additional capital expenditure"	-	2189.48	-	1706.40	-
Closing capital cost	**246119.82**	**539732.66**	**566316.36**	**590889.08**	**600435.91**

Annual Fixed Charges allowed

(Rs.in lakh)

	2015-16			2016-17	2017-18	2018-19
	18.6.2015 to 28.8.2015	29.8.2015 to 4.9.2015	5.9.2015 to 31.3.2016			
Depreciation	2530.57	524.56	15888.66	28067.30	29363.02	30228.40
Interest on Loan	3385.50	711.36	20991.04	36004.64	34931.84	33144.48
Return on Equity	2211.06	443.38	13569.28	31429.49	32941.55	34041.35
Interest on Working Capital	928.30	184.18	5506.31	9884.00	10162.80	10248.91
O&M Expenses	1673.11	325.75	9725.98	18412.00	19719.13	21038.79
Total	**10728.55**	**2189.23**	**65681.28**	**123797.43**	**127118.34**	**128701.93**

3. The Petitioner in the present Petition has claimed the following capital cost and annual fixed charges:

Capital cost claimed

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Capital Cost	603654.28	605407.28	610257.28	613907.28	613907.28
Add: Additions during the year/period	1753.00	4850.00	3650.00	0.00	0.00
Closing capital cost	**605407.28**	**610257.28**	**613907.28**	**613907.28**	**613907.28**

	2019-20	2020-21	2021-22	2022-23	2023-24
Average capital cost	**604530.78**	**607832.28**	**612082.28**	**613907.28**	**613907.28**

Annual fixed charges claimed

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Return on Equity	34297.53	34452.18	34667.04	34775.22	34775.22
Return on Equity for the addition beyond the cut-off date	4.95	48.28	25.38	25.38	25.38
Interest on Loan	29293.40	26482.09	23716.04	20772.56	17702.23
Depreciation	31565.40	31732.95	31948.64	32041.26	32041.26
Interest on Working Capital	9886.85	9943.18	9977.02	9991.78	9993.94
O&M Expenses	23814.62	25583.67	26979.10	28107.57	29182.72
Total Annual Fixed Charges	**128862.75**	**128242.34**	**127313.22**	**125713.77**	**123720.74**

4. Respondents TANGEDCO and KSEBL have filed their replies vide affidavits dated 8.12.2020 and 20.7.2021, respectively. The Petitioner, vide affidavit dated 23.4.2021(TANGEDCO) and 26.7.2021 (KSEBL), has filed its rejoinders to the said replies. The Petitioner has also filed the additional information, vide affidavits dated 28.6.2021, 19.10.2021, 21.9.2022, and 12.12.2022, after serving a copy on the Respondents. The Petition was heard on 6.9.2022 (along with Petition No. 528/GT/2020-tariff for the period 2014-19 after truing up exercise), and the Commission directed the Petitioner to submit certain additional information. In response, the Petitioner vide affidavit dated 21.9.2022 filed the additional information after serving copies on the Respondents. The Respondent TANGEDCO has filed its reply vide affidavit dated 6.10.2022, and the Petitioner vide affidavit dated 18.10.2022 has filed its rejoinder to the said reply. The Petition was thereafter heard on 2.11.2022 along with Petition No. 528/GT/2020, and the Commission, after directing the Petitioner to submit certain additional information (in Petition No. 528/GT/2020), reserved its order in both the Petitions. In response, the Petitioner vide affidavit dated 12.12.2022 has filed the additional information after serving a copy to the Respondents. The Respondent TANGEDCO vide affidavit dated 20.12.2022, has filed a combined reply for both the Petitions on the additional information, and the Petitioner, vide affidavit dated

29.12.2022, has filed its rejoinder to the same. Since the order in the present Petition could not be issued prior to one Member of this Commission, who formed part of the Coram demitting office, this Petition was re-listed and reserved for orders on 6.2.2024. However, as the order in the Petition (which was reserved on 6.2.2024) could not be issued, the matter was again re-listed for hearing on 13.6.2024. During the hearing, the learned counsels for the Petitioner and the Respondent TANGEDCO submitted that since the pleadings and arguments have already been completed, the Commission may reserve its order in the petition. Based on the consent of the parties, the Commission reserved its order in the petition. Accordingly, taking into consideration the submissions of the parties and the documents available on record, we proceed to examine the claims of the Petitioner on prudence check, as stated in the subsequent paragraphs.

Capital Cost

5. Clause (1) of Regulation 19 of the 2019 Tariff Regulations provides that the capital cost as determined by the Commission after prudence check, in accordance with this regulation, shall form the basis of the determination of tariff for existing and new projects. Clause 3 of Regulation 19 of the 2019 Tariff Regulations provides as under:

> *"(3) The Capital cost of an existing project shall include the following:*
>
> *(a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
>
> *(b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
>
> *(c) Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;*
>
> *(d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
>
> *(e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
>
> *(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries."*

6. The Commission, vide its order dated 21.6.2024 in Petition No. 528/GT/2020, allowed the closing capital cost of Rs. 600435.91 lakh, as on 31.3.2019. Accordingly, in terms of Regulation 19(3) of the 2019 Tariff Regulations, the capital cost of Rs. 600435.91 lakh, has been considered as the opening capital cost as on 1.4.2019, for the purpose of determining the tariff for the period 2019-24.

Additional Capital Expenditure

7. Regulations 25 and 26 of the 2019 Tariff Regulations, provide as under:

"25. Additional Capitalisation within the original scope and after the cut-off date:

(1) The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:

(a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;

(b) Change in law or compliance of any existing law;

(c) Deferred works relating to ash pond or ash handling system in the original scope of work;

(d) Liability for works executed prior to the cut-off date;

(e) Force Majeure events;

(f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and

(g) Raising of ash dyke as a part of ash disposal system.

(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:

(a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;

(b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;

(c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and

(d) The replacement of such asset or equipment has otherwise been allowed by the Commission.

26. Additional Capitalisation beyond the original scope

(1) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts beyond the original scope, may be admitted by the Commission, subject to prudence check:

(a) Liabilities to meet award of arbitration or for compliance of order or directions of any statutory authority, or order or decree of any court of law;

(b) Change in law or compliance of any existing law;

(c) Force Majeure events;

(d) Need for higher security and safety of the plant as advised or directed by appropriate Indian Government Instrumentality or statutory authorities responsible for national or internal security;

(e) Deferred works relating to ash pond or ash handling system in additional to the original scope of work, on case to case basis:

Provided also that if any expenditure has been claimed under Renovation and Modernisation (R&M) or repairs and maintenance under O&M expenses, the same shall not be claimed under this Regulation;

(f) Usage of water from sewage treatment plant in thermal generating station.

(2) In case of de-capitalisation of assets of a generating company or the transmission licensee, as the case may be, the original cost of such asset as on the date of decapitalisation shall be deducted from the value of gross fixed asset and corresponding loan as well as equity shall be deducted from outstanding loan and the equity respectively in the year such de-capitalisation takes place with corresponding adjustments in cumulative depreciation and cumulative repayment of loan, duly taking into consideration the year in which it was capitalised."

8. Respondent, TANGEDCO has submitted that the COD of the generating station is 29.8.2015, and the cut-off date for the station is 31.3.2018 and, therefore, Regulations 25 and 26 of the 2019 Tariff Regulations are applicable for admitting the additional capital expenditure after cut-off date. The Respondent has further stated that while Regulation 25 of the 2019 Tariff Regulations allows the additional capital expenditure within the original scope and after the cut-off date, subject to fulfilment of the conditions therein, Regulation 26 of the 2019 Tariff Regulations allows the additional capital expenditure beyond the original scope. The Respondent pointed out that the Petitioner in Form 9 has not indicated the Regulations under which the additional capital expenditure is claimed for the period 2019-24. In response, the Petitioner has submitted that the Petitioner has claimed the projected additional capital expenditure for the years 2019-20, 2020-21, and 2021-22, along with the Regulations in Form 9.

9. The Commission, vide its ROP of the hearing dated 6.9.2022, had directed the Petitioner to submit revised Form-9A clearly indicating the sub-clause of the relevant regulations, under which the additional capital expenditure was claimed. In response, the Petitioner, vide affidavit dated 21.9.2022, has submitted the revised Form 9A,

specifying the relevant regulations under which the additional capital expenditure has been claimed for the period 2019-24.

10. The Petitioner has not claimed any additional capital expenditure for the years 2022-23 and 2023-24. However, the projected additional capital expenditure claimed by the Petitioner for the period 2019-22 are as under:

(Rs. in lakh)

Sl. No	Head of Work/Equipment	Regulation	2019-20	2020-21	2021-22
A	**Works within original scope, change-in-law etc.**				
1	Ash Dyke	Reg 25 (1)(C)	618.00	-	-
2	Implementation of ERP	Reg 25 (1) (b)	800.00	-	-
3	Natural Draft Cooling Tower (NDCT) Modification	Reg 25 (2)(C)	200.00	3100.00	3300.00
4	Additional Silos	Reg 25 (1)(C)	-	500.00	350.00
	Sub-Total (A)		**1618.00**	**3600.00**	**3650.00**
B	**Works beyond Original scope excluding add-cap due to Change in Law.**				
1	HPT Rotor	Reg 26 (1)(C)	135.00	1250.00	-
	Sub- Total (B)		**135.00**	**1250.00**	**-**
Total Additional capital expenditure claimed (A+B)			**1753.00**	**4850.00**	**3650.00**

11. We now examine the projected additional capital expenditure claimed by the Petitioner as under:

Ash Dyke

12. The Petitioner has claimed the projected additional capital expenditure of Rs.618.00 lakh towards Ash dyke in 2019-20, under Regulation 25(1)(c) of the 2019 Tariff Regulations. In justification for the same, the Petitioner has submitted that it is a standby arrangement to ensure 100% ash evacuation for uninterrupted generation of power.

13. Respondent KSEBL submitted that the Petitioner has not justified the requirement of the proposed expenditure. In response, the Petitioner has clarified that the generating station is equipped with only a Dry Ash disposal system. Hence, in case of issues in the disposal of dry fly ash by the cement & brick manufacturing companies, an Ash dyke is necessary for contingency disposal of ash, ensuring sustained power generation. The Petitioner has further submitted that the proposed expenditure of Rs. 618.00 lakh in

2019-20 towards Ash dyke has been claimed under Regulation 25 (1), which allows additional capital expenditure within the original scope and after the cut-off date.

14. The matter has been considered. It is observed that the Petitioner has claimed the total additional capital expenditure of Rs 618.00 lakh towards the Ash dyke in 2019-20 under Regulation 25(1)(c) of the 2019 Tariff Regulations, which covers the deferred work relating to the ash pond or ash handling system within the original scope of work and after the cut-off date. The cut-off date of the generating station is 31.3.2018. However, keeping in view that the ash-related works are continuous in nature during the entire operational life of the generating station and are within the original scope of work, we **allow** the projected additional capital expenditure claimed by the Petitioner under Regulation 25(1)(c) of the 2019 Tariff Regulations. This is subject to the condition that the Petitioner, at the time of truing-up of the tariff, shall furnish the complete details and the amount envisaged for the ash dyke work, as per the original investment approval, along with the amount of work completed towards the Ash dyke, reconciling with Form-B. In addition, the Petitioner has submitted that the generating station is equipped only with a dry ash disposal system. In view of this, the Petitioner shall, at the time of truing-up of tariff, also provide a detailed explanation for the necessity of an ash dyke, despite the absence of a wet ash handling system.

Implementation of ERP

15. The Petitioner has claimed the projected additional capital expenditure of Rs. 800.00 lakh towards the implementation of ERP in 2019-20 under Regulation 25(1)(b) of the 2019 Tariff Regulations. In justification for this claim, the Petitioner has submitted that the implementation of ERP is intended to improve system performance in the Finance, Human Resources, and Technical Departments.

16. Respondent KSEBL submitted that the Petitioner has not justified the requirement

of the proposed expenditure. In response, the Petitioner has submitted that ERP is implemented in the generating station to improve the system performance in the Finance, Human Resources and Technical Departments.

17. The matter has been considered. Since the expenditure is part of the original scope and is considered necessary for the efficient management of the activities of the generating station, the projected additional capital expenditure claimed by the Petitioner is **allowed**. However, the Petitioner shall furnish the complete details and the amount envisaged for the work of implementation of ERP, as per original investment approval reconciling with Form-B, at the time of filing the truing up Petition.

Natural Draft Cooling Tower (NDCT) Modification

18. The Petitioner has claimed the projected additional capital expenditure of Rs. 6600.00 lakhs during 2019-22 (Rs. 200.00 lakhs in 2019-20, Rs. 3100.00 lakh in 2020-21, and Rs. 3300.00 lakh in 2021-22) towards the modification of the Natural Draft Cooling Tower (NDCT) under Regulation 25(2)(c) of the 2019 Tariff Regulations. In justification for the same, the Petitioner submitted that the modification aims to improve the NDCT thermal performance and its capability, as well as to enhance the station heat rate and efficiency. It has also been submitted that M/s. Gammon India Limited, to whom the NDCT package was awarded, is yet to complete the PG test, since both the NDCTs have not performed as per design since inception, and therefore, the Petitioner has proposed to engage another agency to re-design the complete water distribution system at an estimated expense of Rs. 66 crores.

19. Respondents TANGEDCO and KSEBL have mainly stated that the generating station was commissioned in 2015, but the Petitioner has not provided any detailed information on the necessity and nature of the modification required. In response, the Petitioner has clarified that NDCT forms part of the original scope of work for the project.

It has also clarified that the modifications include retrofitting the internals such as fills, nozzles, and the water distribution system to enhance the thermal performance and capability of the NDCT and these improvements will, in turn, enhance the Station Heat Rate and efficiency. The Petitioner has further submitted that the proposed modification expenses for the NDCT fall under Regulation 25 of the 2019 Tariff Regulations, which allows the additional capital expenditure within the original scope of work and even after the cut-off date.

20. The Commission, vide ROP of the hearing dated 6.9.2022, directed the Petitioner to furnish the details with regard to the expenditure of Rs 6600.00 lakh for modification in the natural draft cooling tower along with the reason and justification for claiming such a huge expenditure along with its cost-benefit analysis. In response, the Petitioner vide affidavit dated 21.9.2022 submitted that the contract work for the "NDCT Package" was awarded to M/s Gammon India Limited, who is yet to complete the PG testing process. It has also submitted that the financial loss on account of the additional coal consumption due to higher Condenser BP is Rs. 91.19 crore during the period from 2016-17 to 2021-22. The Petitioner has submitted that the average financial loss is Rs. 17.70 crore/annum, including the cost of the water treatment chemicals, and hence, the Petitioner has proposed to engage an agency to re-design the complete water distribution system consisting of distribution pipes, nozzles, and splash fills, the vital system of cooling tower and replace the existing water distribution system with redesigned system to enhance the performance of cooling towers at an estimate of Rs. 66.00 crore.

21. Respondent TANGEDCO mainly submitted that the details of the guarantee period, action taken to encash the Performance guarantee, and other recoveries as per the contract have not been indicated by the Petitioner, and the Commission may direct

the Petitioner to furnish all details. It has also stated that a comprehensive study shall be made by competent agencies such as CECRI to analyse the cause of failure within 5 years before going in for re-designing. The Respondent has pointed out that the failure is on the part of the Petitioner in not enforcing strict inspection in the checking of materials/ workmanship, and therefore, this additional cost of Rs. 66 crores shall be to the account of Petitioner, as the initial cost incurred during the execution of the project has been added in the capital cost which is being serviced by the beneficiaries. In response, the Petitioner has clarified that both NDCTs have not performed as per design since inception, and M/s Gammon India Limited is reluctant to come forward to complete the PG test process. The Petitioner has also submitted that the guarantee period is one year from the date of handing over of the package by the contractor, but as the package has not yet handed over due to unsuccessful conductance of the PG Test, the guarantee period is not yet defined. The Petitioner has stated that it has acted to encash the Contract Performance Guarantee (CPG), but M/s Gammon India Limited has filed an arbitration against the same and the matter is pending.

22. The matter has been considered. We note from the above submissions that the NDCT package has not yet been handed over to the Petitioner by the contractor due to the unsuccessful conduct of the PG test. Also, the Petitioner's efforts to encash the CPG are subject to arbitration and is still pending. Keeping in view that the previous contract has not yet been settled, the projected additional capital expenditure for the new contract, in respect of the same work, which is still in progress, cannot be permitted. However, the Petitioner is granted liberty to claim the same along with all relevant details at the time of truing-up of tariff.

Additional Silos

23. The Petitioner has claimed the projected additional capital expenditure of Rs. 850.00 lakh (Rs. 500.00 lakh in 2020-21 and Rs. 350.00 lakh in 2021-22) for the period 2020-22, towards Additional silos under Regulation 25(1)(c) of the 2019 Tariff Regulations. In justification for the same, the Petitioner has submitted that the goal is to increase the storage capacity of Dry Ash to ensure uninterrupted power generation.

24. Respondents TANGEDCO and KSEBL have mainly stated that the Petitioner has not justified the requirement of the proposed expenditure, and, therefore, the above claims may be disallowed. In response, the Petitioner has submitted that the generating station is equipped with only Dry Ash disposal system hence in case of issues in the disposal of dry fly ash by cement & brick manufacturing companies, the additional silos are necessary for increasing the storage capacity of Dry Fly Ash, thus ensuring sustained power generation.

25. The matter has been considered. The Petitioner has claimed the said expenditure under Regulation 25 (1)(c) of the 2019 Tariff Regulations, which provides for deferred work relating to an ash pond or ash handling system within the original scope of work and after the cut-off date. The Petitioner has submitted that the said silos are procured to ensure uninterrupted power generation by increasing the storage capacity of Dry fly ash. The Petitioner is already equipped with the dry ash disposal system, and silos are additional requirements. It is, therefore, not clear as to how the claims towards additional silos are covered under the original scope of work. In his background, the claim of the Petitioner is not allowed at this stage. However, the Petitioner is granted liberty to claim the said expenditure towards additional silos at the time of truing-up of tariff. The Petitioner is also directed to provide the details and break-up of the ash disposal system and ash handling, linking the requirement of additional silos in the original scope of work

and reconciling the same with the investment approval cost.

HPT Rotor

26. The Petitioner has claimed the projected additional capital expenditure of Rs. 1385.00 lakh during 2019-21 (Rs. 135.00 lakh in 2019-20 and Rs. 1250.00 lakh in 2020-21) towards HPT rotor under Regulation 26(1)(c) of the 2019 Tariff Regulations. In justification for the same, the Petitioner has submitted that this item/asset is for stand-by to ensure the uninterrupted generation of power.

27. Respondents TANGEDCO and KSEBL have submitted that the commissioning of two units which was in 2015, renders the need for purchasing a new rotor unjustified. They have also stated that the Petitioner had previously sought approval for the procurement of an LP rotor, wherein the Commission had directed them to provide details and justification for the said procurement. However, the Petitioner is now seeking approval for the procurement of the same. Respondent TANGEDCO contends that the station only achieved the Date of Commercial Operation (DOCO) in 2015, and considering the make, original equipment manufacturer's warranty, and the minimal life period served by the turbine from the DOCO date, the inclusion of expenses for the idle HP rotor does not appear reasonable. Additionally, in the year 2020-21, an amount of Rs. 1250.00 lakh has been claimed without providing details, actual cost, or justification for the claim, and the details and justification for the claim should be furnished by the Petitioner. In response, the Petitioner has submitted that in case of any failure of the HP Rotor, lead time for the procurement of the HP Rotor will take more than 18 months and hence, it is necessary to keep a standby rotor to ensure the restoration of the Unit at a minimum time period to minimize loss of power generation and to cater the power demand of Southern states. The Petitioner has also submitted that a phased expenditure of Rs 135.00 lakh was considered in 2019-20, and Rs 1250.00 lakh was

considered in 2020-21 towards the procurement of HP Rotor. and also, the claim towards the same is covered under Regulation 26 of the 2019 Tariff Regulations which allows the additional capitalization beyond the original scope of work.

28. The matter has been considered. The Petitioner has claimed the expenditure of Rs 1385.00 lakh towards HP rotor under Regulation 26(1)(c) of the 2019 Tariff Regulations, which provides for consideration of the additional capital expenditure beyond the original scope of work towards force majeure events. The COD of the generation station is 29.8.2015, and hence, the cut-off date of the generating station is 31.3.2018. It is noticed that in respect of the additional capitalization claim of the Petitioner for HP rotor, the Commission, vide its order dated 11.7.2017 in Petition No.135/GT/2015, had observed as under:

> *The petitioner has also not submitted as to whether the assets like Generator Rotor, LP/HP rotor etc are in the nature of spares or whether these assets are required to replace the existing rotors due to breakdown...." The Petitioner is however directed to submit detailed justification along with relevant clauses / documentary evidence at the time of truing up of tariff ...."*

29. However, the Petitioner, vide affidavit dated 5.7.2022, has submitted that a phased expenditure of Rs 135.00 lakh was considered in 2019-20 and Rs 1250.00 lakh was considered in 2020-21 and has reiterated that the claim towards procurement of HP Rotor is covered under Regulation 26 of the 2019 Tariff Regulations which allows additional capitalization beyond the original scope of work. It is noticed that the claim of the Petitioner is in nature of spares and the 4% of plant & equipment limit towards the initial spares for the generating station has already been exhausted. In this background, we find no reason to allow the claim of the Petitioner. However, the same may be considered as a "capital spare" and reimbursed under O&M as and when the asset is put to use by the Petitioner.

Additional capital expenditure allowed

30. Based on the above, the additional capital expenditure claimed and allowed for the period 2019-22 is as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22
Claimed	1753.00	4850.00	3650.00
Allowed	**1418.00**	-	-

Capital cost allowed for the period 2019-24

31. Accordingly, the capital cost allowed for the generating station period 2019-24 is as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Opening capital cost	600435.91	601853.91	601853.91	601853.91	601853.91
Add: Additional capital expenditure	1418.00	0.00	0.00	0.00	0.00
Closing capital cost	**601853.91**	**601853.91**	**601853.91**	**601853.91**	**601853.91**

Debt-Equity Ratio

32. Regulation 18 of the 2019 Tariff Regulations provides as under:

> *"18. Debt-Equity Ratio: (1) For a new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:*
>
> *Provided that:*
>
> *i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:*
>
> *ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:*
>
> *iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.*
>
> *Explanation.-The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.*
>
> *(2)The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.*
>
> *(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt:*

equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

Provided that in case of generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30% shall not be taken into account for tariff computation;

Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernization expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.

33. The Commission. vide its order dated 21.6.2024 in Petition No. 528/GT/2020, had considered the gross normative loan and equity of Rs. 426712.42 lakh (i.e., 71.07% of the admitted capital cost as on 31.3.2019) and Rs. 173723.49 lakh (i.e., 28.93% of the admitted capital cost as on 31.3.2019), respectively. The same has been considered as gross loan and equity as on 1.4.2019. The debt-equity ratio of 71.07:28.93 has been considered as on 1.4.2019. The Petitioner has claimed the debt-equity ratio of 0:100 for additional capital expenditure for the period 2019-24 in Form-10. In view of Regulation 18(5) read with Regulation 18(1), the debt-equity ratio for the additional capital expenditure for the period 2019-24 has been considered as 70:30. Accordingly, the debt-equity ratio has been approved as under:

	As on 1.4.2019		Additional capital expenditure during 2019-24		As on 31.3.2024	
	Rs. in lakh	(%)	Rs. in lakh	(%)	Rs. in lakh	(%)
Debt	426712.42	71.07	992.60	70:00	427705.02	71.06
Equity	173723.49	28.93	425.40	30:00	174148.89	28.94
Total	**600435.91**	**100.00**	**1418.00**	**100.00**	**601853.91**	**100.00**

Return on Equity

34. Regulation 30 of the 2019 Tariff Regulations provides as under:

"30. Return on Equity:

(1) Return on equity shall be computed in rupee terms on the equity base determined in accordance with Regulation 18 of these regulations.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations transmission system including communication system and run of river hydro generating station and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

Provided further that:

(i) In case of a new project the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO) data telemetry communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;

(ii) in case of existing generating station as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;

(iii) in case of a thermal generating station with effect from 1.4.2020:

(a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;

(b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute subject to ceiling of additional rate of return on equity of 1.00%:

Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.

35. Regulation 31 of the 2019 Tariff Regulations provides as under:

"31. Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission as the case may be) shall be excluded for the calculation of effective tax rate.

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where "t" is the effective tax rate in accordance with Clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business as the case may be and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT) "t" shall be considered as MAT rate including

surcharge and cess.

Illustration-

(i) In case of the generating company or the transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess:

Rate of return on equity = 15.50/(1-0.2155) = 19.758%

(ii) In case of a generating company or the transmission licensee paying normal corporate tax including surcharge and cess:

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1000 crore;

(b) Estimated Advance Tax for the year on above is Rs 240 crore;

(c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;

(d) Rate of return on equity = 15.50/ (1-0.24) = 20.395%.

(3) The generating company or the transmission licensee as the case may be shall true up the grossed-up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty if any arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up shall be recovered or refunded to beneficiaries or the long-term transmission customers as the case may be on year to year basis."

36. The Petitioner has claimed HPT Rotor as additional capital expenditure as works beyond the original scope, excluding the additional capital expenditure due to a change in law under Regulation 26(1)(c) and has accordingly claimed ROE at the Weighted Average Rate of Interest (WAROI). However, the Commission has not allowed the additional capitalisation towards the HPT Rotor in this order. For the additional capital expenditure within the original scope of work and after the cut-off date, the Petitioner has claimed the ROE, considering the base rate of 15.50% and the effective tax rate of 21.550 % for the period 2019-24, and the same has been considered for the purpose of tariff. Accordingly, ROE has been worked out and allowed as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Normative Equity - Opening	173723.49	174148.89	174148.89	174148.89	174148.89
Add: Addition of Equity due to additional capital expenditure	425.40	0.00	0.00	0.00	0.00
Normative Equity - Closing	174148.89	174148.89	174148.89	174148.89	174148.89
Average Normative Equity	173936.19	174133.72	174133.72	174133.72	174133.72
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
Effective Tax Rate for the respective year/period	21.550%	21.550%	21.550%	21.550%	21.550%
Rate of Return on Equity	19.758%	19.758%	19.758%	19.758%	19.758%

	2019-20	2020-21	2021-22	2022-23	2023-24
(Pre-tax)					
Return on Equity (Pre-tax) - (annualised)	**34366.31**	**34408.34**	**34408.34**	**34408.34**	**34408.34**

Interest on Loan

37. Regulation 32 of the 2019 Tariff Regulations provides as under:

> *"32. Interest on loan capital: (1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.*
>
> *(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.*
>
> *(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalization of such asset.*
>
> *(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.*
>
> *(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:*
>
> *Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:*
>
> *Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.*
>
> *(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.*
>
> *(7) The changes to the terms and conditions of the loan shall be reflected from the date of such re-financing."*

38. Interest on the loan has been computed as under:

(i) The 'gross loan' and the 'net loan' amounting to Rs. 426712.42 lakh and Rs. 320109.90 lakh respectively, as on 31.3.2019, as considered in order dated 21.6.2024 in Petition No. 528/GT/2020, has been retained as on 1.4.2019.

(ii) Addition to normative loan on account of additional capital expenditure approved above has been considered;

(iii) Depreciation allowed has been considered as the repayment of the normative loan during the respective years of the period 2019-24;

(iv) WAROI as claimed by the Petitioner, has been considered for the purpose of tariff;

39. The necessary calculation of Interest on a loan is as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Opening Loan **(A)**	426712.42	427705.02	427705.02	427705.02	427705.02
Cumulative Repayments of Loan up to Previous Year **(B)**	106602.52	137110.62	167654.71	198198.80	228742.88
Net Opening Loan **(C =A-B)**	**320109.90**	**290594.40**	**260050.31**	**229506.22**	**198962.14**
Less: Repayments during the year **(D)**	**30508.10**	**30544.09**	**30544.09**	**30544.09**	**30544.09**
Addition due to additional capital expenditure **(E)**	992.60	0.00	0.00	0.00	0.00
Net Closing Loan **(F = C-D+E)**	**290594.40**	**260050.31**	**229506.22**	**198962.14**	**168418.05**
Average Loan **(G=(F+C)/2)**	305352.15	275322.35	244778.27	214234.18	183690.10
Weighted Average Rate of Interest **(H)**	9.582%	9.582%	9.582%	9.582%	9.582%
Interest on Loan (I=H*G)	**29260.06**	**26382.49**	**23455.63**	**20528.78**	**17601.92**

Depreciation

40. Regulation 33 of the 2019 Tariff Regulations provides as under:

> *"33. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:*
>
> *Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.*
>
> *(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.*
>
> *(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:*
>
> *Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable;*
>
> *Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:*
>
> *Provided also that the capital cost of the assets of the hydro generating station for the*

purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:
Provided also that any depreciation disallowed on account of lower availability of the generating station or unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life or the extended life.

(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2019 from the gross depreciable value of the assets.

(7) The generating company or the transmission license, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.

(8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services."

41. Since, as on 1.4.2019, the generating station has not completed its useful life of 12 years from the effective station COD (i.e., 24.7.2015), depreciation has been calculated by applying the weighted average rate of depreciation (WAROD) for the period 2019-24. WAROD, as claimed by the Petitioner, has been considered. Necessary calculations in support of depreciation are as under:

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Opening Capital Cost **(A1)**	600435.91	601853.91	601853.91	601853.91	601853.91
Addition During the year **(A2)**	1418.00	-	-	-	-
Closing Capital Cost **(A3)**	601853.91	601853.91	601853.91	601853.91	601853.91
Average capital cost **(A = (A1+A3)/2)**	601144.91	601853.91	601853.91	601853.91	601853.91
Less: Land Value **(B)**	0.00	0.00	0.00	0.00	0.00
Aggregate Depreciation value at 90% **(C =0.9*(A-B))**	541030.42	541668.52	541668.52	541668.52	541668.52
Balance useful life **(D)**	21.31	20.31	19.31	18.31	17.31
Remaining depreciable value at the beginning of the year **(E) = [(C) –**	434427.90*	404557.89	374013.81	343469.72	312925.64

	2019-20	2020-21	2021-22	2022-23	2023-24
(Cumulative depreciation at the end of the preceding period i.e., 'H')]					
Weighted Average Rate of Depreciation **(F)**	5.075%	5.075%	5.075%	5.075%	5.075%
Depreciation during the year (G) = (Ax F)	**30508.10**	**30544.09**	**30544.09**	**30544.09**	**30544.09**
Cumulative depreciation at the end of the year (H) = [(G)+ (Cumulative depreciation at the end of previous period)]	137110.62*	167654.71	198198.80	228742.88	259286.97

**Cumulative depreciation as on 1.4.2019 has been considered as Rs.106602.52 lakh*

Operation & Maintenance Expenses

42. The O&M expenses claimed by the Petitioner is as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Normative O&M expenses claimed under Regulation 35(1)(1) of the 2019 Tariff Regulations (a)	22510	23300	24120	24970	25840
Normative O&M expenses allowed under Regulation 35(1)(1) of the 2019 Tariff Regulations(b)	22510	23300	24120	24970	25840
Additional O&M on Desalination Plant claimed under Regulation 35(1)(6) of the 2019 Tariff Regulations(c)	611.10	641.66	673.74	707.42	742.80
Additional O&M on Desalination Plant allowed under Regulation 35(1)(6) of the 2019 Tariff Regulations(d)	602.72	623.82	645.65	668.04	691.42
Water Charges claimed under Regulation 35(1)(6) of the 2019 Tariff Regulations (e)	27.77	29.16	30.62	32.15	33.76
Water Charges allowed under Regulation 35(1)(6) of the 2019 Tariff Regulations (f)	26.45	26.45	26.45	26.45	26.45
Security Expenses claimed under Regulation 35(1)(6) of the 2019 Tariff Regulations (g)	665.75	1612.85	2154.74	2397.99	2566.16
Security Expenses allowed under Regulation 35(1)(6) of the 2019 Tariff Regulations (h)	665.75	1612.85	2154.74	2397.99	2566.16
Total O&M expenses allowed under Regulation 35 of the 2019 Tariff Regulations (b+d+f+h)	**23804.92**	**25563.12**	**26946.84**	**280632.48**	**29124.03**

43. The normative O&M expenses claimed by the Petitioner are in terms of Regulation

35(1)(1) of the 2019 Tariff Regulations and hence allowed.

Water Charges

44. Regulation 35(1)(6) of the 2019 Tariff Regulations provides for water charges, security expenses and capital spares as under:

> *"35(1)(6) The Water, Security Expenses and Capital Spares for thermal generating stations shall be allowed separately and after prudence check:*
> *Provided that water charges shall be allowed based on water consumption depending upon type of plant, type of cooling water system etc., subject to prudence check. The details regarding the same shall be furnished along with the petition:*
>
> *Provided further that the generating station shall submit the assessment of the security requirement and estimated expenses;*
>
> *Provided also that the generating station shall submit the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification for incurring the same and substantiating that the same is not funded through compensatory allowance as per Regulation 17 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 or Special Allowance or claimed as part of additional capitalization or consumption of stores and spares and renovation and modernization."*

45. The actual water charges claimed by the Petitioner in Petition No. 528/GT/2020 for the period 2014-19 and allowed by order dated 21.6.2024 are as under:

(Rs. in lakh)

	2015-16 (from COD)	2016-17	2017-18	2018-19
Claimed	13.04	13.04	15.70	26.45
Approved	13.04	13.04	15.70	26.45

46. The details of water charges claimed by the Petitioner are as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
27.77	29.16	30.62	32.15	33.76

47. The matter has been considered. In terms of the first proviso to Regulation 35(1)(6) of the 2019 Tariff Regulations, water charges are to be allowed based on the water consumption depending upon the type of plant, type of cooling water system, etc., subject to prudence check of the details furnished by the Petitioner. The Petitioner has submitted that the generating station has a closed-circuit seawater cooling system. The water charge claimed by the Petitioner consists of the consent fee payable to the Tamil

Nadu Pollution Control Board under the Water Act. The Petitioner has claimed the projected water charges for the period 2019-24, based on the actual expenditure incurred for the year 2018-19 and by an escalation of 5% each year. It is noticed that the Petitioner has not furnished any justification for the escalation claimed. Considering the fact that the Commission vide its order dated 21.6.2024 in Petition No. 528/GT/2020 had allowed the water charges of Rs 26.45 lakh in 2018-19 based on audited figures, the same has been also considered and allowed for the period 2019-24. Accordingly, the projected water charges allowed for the period 2019-24 are as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
26.45	26.45	26.45	26.45	26.45

48. The water charges allowed above are subject to the Petitioner furnishing all the details on actual consumption at the time of truing up of tariff. The Petitioner, at the time of truing up, is required to furnish documents pertaining to the agreement, as well as the receipt for the consent fee paid to the Tamil Nadu Pollution Control Board.

Security Expenses

49. The security expenses claimed by the Petitioner are as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
665.75	1612.85	2154.74	2397.99	2566.16

50. The Petitioner has submitted that the above expenses have been claimed based on the estimated expenses for the period 2019-24 and are subject to adjustment based on actuals at the time of truing up. We have examined the matter. Though the Petitioner has claimed projected security expenses, it has not furnished the assessment of security requirements as required under the second proviso to Regulation 35(1)(6) of the 2019 Tariff Regulations. Accordingly, the Petitioner is directed to furnish the requisite details for carrying out the prudence check of security expenses at the time of

truing up of tariff. For the present, the projected security expenses for the period 2019-24 have been considered for the purpose of tariff. Accordingly, the security expenses as claimed by the Petitioner are allowed.

Capital Spares

51. The Petitioner has not claimed capital spares during the period 2019-24 but has submitted that the same shall be claimed based on actual consumption of spares during the period 2019-24, at the time of truing up, in terms of proviso to Regulation 35(1)(6) of the 2019 Tariff Regulations. Accordingly, the same has not been considered in this order. The claim of the Petitioner, if any, towards capital spares at the time of truing up shall be considered on merits after prudence check.

Additional O&M expenses

Desalination plant

52. The Petitioner has claimed the projected O&M expenses for the period 2019-24 based on the actual expenditure incurred in 2018-19 towards chemicals, filters, and membranes used in the desalination plant. The expenses have been claimed at an escalation rate of 5% based on actual O&M expenses for 2018-19, as under.

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
611.10	641.66	673.74	707.42	742.80

53. It is observed that these special features of the coastal generating station are required for the smooth and efficient operation of the generating station. Moreover, the normative O&M expenses under the 2019 Tariff Regulations do not include the expenditures incurred for the additional features viz. the desalination plant. The Petitioner, in respect of the additional O&M expenses, claimed towards the desalination plant in Petition No. 528/GT/2020, had furnished the LOAs issued to the different vendors for the claims made during the period 2015-19, duly certified by an auditor.

Considering the fact that the same was certified by the auditor, the Commission vide order dated 21.6.2024 had allowed the additional O&M expenses for the desalination plant as under:

(Rs. in lakh)

	2015-16		2016-17	2017-18	2018-19
	18.6.2015 to 28.8.2015	29.8.2015 to 31.3.2016			
Additional O&M expenses impact for desalination plant allowed	-	-	318.96	483.42	582.34

54. The Commission, in the said order, had allowed these expenses, stating that the same is required for smooth and efficient operations of the generating station. Accordingly, considering the need for this feature, the additional O&M expenses for the desalination plant have been allowed, based on the actual expenditure incurred during 2018-19, along with an escalation of 3.5% annually in line with the 2019 Tariff Regulations for the period 2019-24. However, the Petitioner shall, at the time of truing up of tariff, furnish the complete breakup clearly indicating each and every expenditure which have been made part of the additional O&M expenditure incurred for the desalination plant.

55. Accordingly, the total O&M expenses, including water charges and security expenses, allowed to the generating station for the period 2019-24 is as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Normative O&M expenses claimed under Regulation 35(1)(1) of the 2019 Tariff Regulations (a)	22510	23300	24120	24970	25840
Normative O&M expenses allowed under Regulation 35(1)(1) of the 2019 Tariff Regulations(b)	22510	23300	24120	24970	25840
Additional O&M on Desalination Plant claimed under Regulation 35(1)(6) of the 2019 Tariff Regulations(c)	611.10	641.66	673.74	707.42	742.80
Additional O&M on Desalination Plant allowed	602.72	623.82	645.65	668.04	691.42

	2019-20	2020-21	2021-22	2022-23	2023-24
under Regulation 35(1)(6) of the 2019 Tariff Regulations(d)					
Water Charges claimed under Regulation 35(1)(6) of the 2019 Tariff Regulations (e)	27.77	29.16	30.62	32.15	33.76
Water Charges allowed under Regulation 35(1)(6) of the 2019 Tariff Regulations (f)	26.45	26.45	26.45	26.45	26.45
Security Expenses claimed under Regulation 35(1)(6) of the 2019 Tariff Regulations (g)	665.75	1612.85	2154.74	2397.99	2566.16
Security Expenses allowed under Regulation 35(1)(6) of the 2019 Tariff Regulations (h)	665.75	1612.85	2154.74	2397.99	2566.16
Total O&M expenses allowed under Regulation 35 of the 2019 Tariff Regulations (b+d+f+h)	**23804.92**	**25563.12**	**26946.84**	**280632.48**	**29124.03**

Operational Norms

56. The Petitioner has considered following operational norms for the purpose of tariff:

Normative Annual Plant Availability Factor (NAPAF) (%)	85.00
Heat Rate (kCal/kwh)	2358.84
Auxiliary Power Consumption (%)	6.75
Specific Oil Consumption (ml/kwh)	0.5

Normative Annual Plant Availability Factor

57. Regulation 49(A)(e) of the 2019 Tariff Regulations provides as under:

> *"**(A) Normative Annual Plant Availability Factor (NAPAF)***
> (a) *For all thermal generating stations, except those covered under clauses (b), (c), (d), & (e) - 85%;*

58. Since the Petitioner has considered NAPAF of 85% in terms of Regulation 49(A)(a) of the 2019 Tariff Regulations, the same is allowed.

Gross Station Heat Rate (kCal/kWh)

59. Regulation 49(C)(b) of the 2019 Tariff Regulations provides as under:

> *"(i) For Coal-based and lignite-fired Thermal Generating Stations:*
> *1.05 X Design Heat Rate (kCal/kWh)*
> *Where the Design Heat Rate of a generating unit means the unit heat rate guaranteed by the supplier at conditions of 100% MCR, zero percent make up, design coal and design cooling water temperature/back pressure Provided that the design heat rate shall not*

exceed the following maximum design unit heat rates depending upon the pressure and temperature ratings of the units:

Pressure Rating (Kg/cm2)	150	170	170
SHT/RHT (^{0}C)	535/535	537/537	537/565
Type of BFP	Electrical Driven	Turbine Driven	Turbine Driven
Max Turbine Heat Rate (kCal/kWh)	1955	1950	1935
Min. Boiler Efficiency			
Sub-Bituminous Indian Coal	0.86	0.86	0.86
Bituminous Imported Coal	0.89	0.89	0.89
Max. Design Heat Rate (kCal/kWh)			
Sub-Bituminous Indian Coal	2273	2267	2250
Bituminous Imported Coal	2197	2191	2174

Provided also that in case of lignite-fired generating stations (including stations based on CFBC technology), maximum design heat rates shall be increased using factor for moisture content given in sub-clause (C)(a)(iv) of this Regulation.

xxx

Note: In respect of generating units where the boiler feed pumps are electrically operated, the maximum design heat rate of the unit shall be 40 kCal/kWh lower than the maximum design heat rate of the unit specified above with turbine driven Boiler Feed Pump"

60. In terms of Regulation 49(C)(b)(i) of the 2019 Tariff Regulations, for the generating station achieving COD on or after 1.4.2009, the Gross Station Heat Rate is 1.05 x design heat rate. The Petitioner has furnished the design Turbine Cycle heat rate of 1932 kCal/kWh and Boiler Efficiency of 85.67%. Accordingly, the design heat rate of the generating station is 2255.17 kCal/kWh (1932/0.8567). Further, the fourth proviso to the above Regulation provides that where the boiler efficiency is lower than 86% for subbituminous Indian coal, the same shall be considered as 86%. Considering the boiler efficiency as 86%, the unit design heat rate works out to 2246.51 kCal/kWh. Provided that the design heat rate shall not exceed the maximum design unit heat rate depending upon the pressure and temperature rating of the units as specified by the Commission, where the design heat rate for plants having temperature and pressure rating nearer to the Petitioner's plant using sub-bituminous coal is given as maximum 2250 kcal/kwh. The Design heat rate of 2246.51 kCal/kWh for this generating station is lower than the ceiling design heat rate of 2250 kcal/kwh. In view of this, the design heat rate of 2246.51

kCal/kWh has been considered as the "design heat rate". Thus, by taking the multiplying factor of 1.05, the applicable Station Heat rate is 2358.84 kcal/kwh (1.05x2246.51). Accordingly, a GSHR of 2358.84 kcal/kWh is considered for the purpose of determining the tariff.

Secondary Fuel Oil Consumption

61. Regulation 49(D)(a) of 2019 Tariff Regulations provides as under:

"(a) Coal-based generating stations other than at (c) below: 0.50 ml/kWh"

62. Since the Petitioner has considered the secondary fuel oil consumption of 0.50 ml/kWh in terms of Regulation 49(D)(a) of the 2019 Tariff Regulations, the same is allowed.

Auxiliary Power Consumption

63. Regulation 49(E)(a) of 2019 Tariff Regulations provides as under:

"49 (E) Auxiliary Energy Consumption

(a) Coal-based generating stations except at (b) below:

	With Natural Draft cooling tower or without cooling Tower
(i) 200 MW series	*8.5%*
(ii) 300/330/350/500 MW and above	
Steam driven boiler feed pumps	*5.75%*
Electrically driven boiler feed pumps	*8.00%*

Provided that for thermal generating stations with induced draft cooling towers and where tube type coal mill is used, the norms shall be further increased by 0.5% and 0.8%, respectively:

Provided further that Additional Auxiliary Energy Consumption as follows shall be allowed for plants with Dry Cooling Systems:

Type of Dry Cooling System	(% of gross generation)
Direct cooling air cooled condensers with mechanical draft fans	1.0%
Indirect cooling system employing jet condensers with pressure recovery turbine and natural draft tower	0.5%

64. The Petitioner has submitted that for the period 2014-19, the Commission vide order dated 11.7.2017 in Petition No.135/GT/2015, while determining the tariff for the

generating station, had allowed an APC of 6.25% against the normative APC of 5.25% considering the special features viz., Cross Country Conveyor system, Shore Unloader and Desalination Plant and also directed to furnish the details of the actual APC, PLF of the generating station from COD to 31.3.2019 at the time of truing up of tariff. Based on the submissions of the Petitioner, the Commission vide its order dated 21.6.2024 in Petition No. 528/GT/2020 had allowed the auxiliary consumption of 6.25%, considering 1% of the additional auxiliary power consumption due to the special features of the desalination plant. The Petitioner, in the present Petition has prayed for an upward revision of the normative Auxiliary Energy Consumption from 5.75% to 6.75% in exercise of the 'power to relax' considering the Auxiliary Energy Consumption for external coal handling plant (jetty and associated infrastructure) and also Desalination Plant as allowed during the period 2014-19.

65. The matter has been considered. It is noticed that Regulation 49(E)(a) of the 2019 Tariff Regulations provides for auxiliary power consumption of 5.75% for the coal-based plants with natural draft cooling towers. Considering 1% additional auxiliary power consumption due to additional features like Offshore conveyor system for coal transportation from mine to sea and from sea to the nearest Tuticorin port, two nos. of electrically operated Shore un-loader installed for unloading of coal from the ship and to transfer coal from ship's hold to materials handling conveyor of the jetty, and for the electrical equipment installed for the desalination plant for RO production, we at present allow the auxiliary power consumption of 6.25% for the period 2019-24, which is same as allowed during the period 2014-19. However, the Petitioner is directed to furnish the details of the actual APC and power consumed by all the additional features along with the PLF of the generating station for the period 2019-24 at the time of the truing-up tariff.

Interest on Working Capital

66. Sub-section (a) of clause (1) of Regulation 34 of the 2019 Tariff Regulations provides as under:

> *"34. **Interest on Working Capital**: (1) The working capital shall cover:*
> *(a) For Coal-based/lignite-fired thermal generating stations:*
> *(i) Cost of coal or lignite and limestone towards stock if applicable for 10 days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;*
> *(ii) Advance payment for 30 days towards cost of coal or lignite and limestone for generation corresponding to the normative annual plant availability factor;*
> *(iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor and in case of use of more than one secondary fuel oil cost of fuel oil stock for the main secondary fuel oil;*
> *(iv) Maintenance spares @ 20% of operation and maintenance expenses including water charges and security expenses;*
> *(v) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on the normative annual plant availability factor; and*
> *(vi) Operation and maintenance expenses including water charges and security expenses for one month.*
> *(b) xxxx*
> *(c) xxxx*
> *(2) The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined:*
> *Provided that in case of new generating station the cost of fuel for the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) and gross calorific value of the fuel as per actual weighted average for three months as used for infirm power preceding date of commercial operation for which tariff is to be determined.*
> *(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof as the case may be is declared under commercial operation whichever is later.*
> *Provided that in case of truing-up the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.*
> *(4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency."*

Fuel Cost and Energy Charges in working capital

67. Regulation 34(2) of the 2019 Tariff Regulations provides for the computation of the

cost of fuel as a part of Interest on Working Capital (IWC), to be based on the landed price and gross calorific value of the fuel as per actuals, for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined. Regulation 43(2) of the 2019 Tariff Regulations provides as under:

> *"(2) Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal places in accordance with the following formulae:*
> *(a) For coal based and lignite fired stations:*
> *ECR = {(SHR – SFC x CVSF) x LPPF / CVPF + SFC x LPSFi + LC x LPL} x 100 / (100 – AUX)*
> *(b) For gas and liquid fuel based stations:*
> *ECR = SHR x LPPF x 100 / {(CVPF) x (100 – AUX)}*
> *Where,*
> *AUX = Normative auxiliary energy consumption in percentage.*
> *CVPF = (a) Weighted Average Gross calorific value of coal as received, in kCal per kg for coal based stations less 85 Kcal/Kg on account of variation during storage at generating station;*
> *(b) Weighted Average Gross calorific value of primary fuel as received, in kCal per kg, per litre or per standard cubic meter, as applicable for lignite, gas and liquid fuel based stations;*
> *(c) In case of blending of fuel from different sources, the weighted average Gross calorific value of primary fuel shall be arrived in proportion to blending ratio:*
> *CVSF = Calorific value of secondary fuel, in kCal per ml;*
> *ECR = Energy charge rate, in Rupees per kWh sent out;*
> *SHR = Gross station heat rate, in kCal per kWh;*
> *LC = Normative limestone consumption in kg per kWh;*
> *LPL = Weighted average landed cost of limestone in Rupees per kg;*
> *LPPF = Weighted average landed fuel cost of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month. (In case of blending of fuel from different sources, the weighted average landed fuel cost of primary fuel shall be arrived in proportion to blending ratio);*
> *SFC= Normative specific fuel oil consumption, in ml per kWh;*
> *LPSFi= Weighted Average Landed Fuel Cost of Secondary Fuel in Rs./ ml during the month:*
> *Provided that energy charge rate for a gas or liquid fuel based station shall be adjusted for open cycle operation based on certification of Member Secretary of respective Regional Power Committee during the month."*

68. The Petitioner has claimed the cost of fuel component in working capital and Energy Charge Rate (ECR) based on the following:

(a) Operational norms as per the 2019 Tariff Regulations;

(b) Price and 'as received GCV of coal procured for the three months of October 2018, November 2018, and December 2018.

(c) Price and GCV of secondary fuel oil for the three months of October, 2018, November, 2018 and December, 2018.

69. The Petitioner has claimed the Energy Charge Rate (ECR) ex-bus of 317.00 paise/kWh for the period 2019-24 for the generating station, based on the GCV and price of fuel (coal and secondary fuel oil) prevailing during the preceding three months. Accordingly, the cost of the fuel component in working capital claimed by the Petitioner is as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Cost of coal for towards stock	12045.07	12045.07	12045.07	12045.07	12045.07
Cost of Coal towards Generation	18067.60	18067.60	18067.60	18067.60	18067.60
Cost of secondary fuel oil for 2 months	244.00	243.33	243.33	243.33	244.00

70. The Petitioner in Form-15 has furnished the details of fuel for the month of October, 2018, November, 2018 and December, 2018. Accordingly, in terms of Regulation 34(2) of the 2019 Tariff Regulations, the computation of cost of fuel as part of IWC is to be based on the landed price and GCV of fuel as per actuals. Therefore, in terms of the said Regulation and based on the submission of the Petitioner, the weighted average price and GCV of coal and oil claimed and allowed for the period 2019-24 is as under:

(Rs. in lakh)

	Claimed	Allowed
Weighted average price of coal (Rs./MT)	4922.859	4940.119
Weighted average GCV of coal (kCal/kg)	3912.58	3922.87
Weighted average price of oil (Rs./KL)	39215.71	39215.71
Weighted average GCV of oil (kCal/Ltr.)	9776.45	9776.45

71. It is noticed that the weighted average price of coal and GCV of coal allowed is higher than the claimed price, and the said variation is due to the fact that while the Petitioner has considered the Gross Station Heat Rate of 2351.25 kCal/kWh as per the 2014 Tariff Regulations, the Commission has allowed the GSHR of 2358.84 kCal/kWh in terms of the 2019 Tariff Regulations. Similarly, the Petitioner has calculated the weighted average price and GCV of coal based on the consumption of coal, but the Commission has considered the net coal supplied for computation of the weighted average price and GCV of coal. Accordingly, the rate of energy charges, based on the

operational norms, as approved above, is determined as under:

	2019-20 & 2023-24	2020-23
Capacity (MW)	1000.00	1000.00
Aux. Power Consumption	6.75%	6.75%
Gross Station Heat Rate (kCal/kwh)	2358.840	2358.840
Specific Fuel Oil Consumption (ml/kwh)	0.50	0.50
Weighted Avg. GCV of Oil (kCal/Lit.)	9776.45	9776.45
Weighted Avg. Price of Oil (Rs/KL)	39215.71	39215.71
Oil Stock- 2 months- (Rs. in Lakhs)	244.00	243.33
Weighted Avg. GCV of Coal (kCal/kg)	3922.87	3922.87
Weighted Avg. Price of Coal (Rs./MT)	4940.119	4940.119
Rate of Energy Charge (Ex Bus) (Paise/kWh)	319.997	319.997

72. Accordingly, the fuel component in working capital, energy charges, and ECR allowed is as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Cost of Coal for 30 days	18141.89	18141.89	18141.89	18141.89	18141.89
Cost of secondary fuel oil for 2 months	244.00	244.00	243.33	243.33	244.00
Energy charges for 45 days	27392.83	27392.83	27392.83	27392.83	27392.83
ECR (Paise/kWh)	319.997	319.997	319.997	319.997	319.997

73. The Petitioner, on a month-to-month basis shall compute and claim the energy charges from the beneficiaries based on formulae given under Regulation 43 of the 2019 Tariff Regulations.

Working Capital for Maintenance Spares

74. The Petitioner in Form-O has claimed maintenance spares in working capital as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
4762.92	5116.73	5395.82	5621.51	5836.54

75. Regulation 34(1)(a)(iv) of the 2019 Tariff Regulations provide for maintenance spares @ 20% of the O&M expenses (including water charges and security expenses). Accordingly, maintenance spares @ 20% of the O&M expenses (including the water charges and security expenses) allowed for the period 2019-24 is as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
4760.98	5112.62	5389.37	5612.50	5824.81

76. The difference between the maintenance spares claimed and those allowed is due to the fact that the Commission has restricted the additional O&M expenses towards desalination plant and water charges as discussed in the relevant paragraphs above.

Working Capital for Receivables

77. In terms of Regulation 34(1)(a)(v) of the 2019 Tariff Regulations, the variable charges for receivables equivalent to 45 days of capacity charges and energy charges is worked out and allowed as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
27392.83	27392.83	27392.83	27392.83	27392.83

78. As per Regulation 34(2) of the 2019 Tariff Regulations, the cost of fuel shall be based on landed fuel cost (taking into account the normative transit and handling losses in terms of Regulation 39 of the 2019 Tariff Regulations) by the generating station and GCV of fuel as per the actual weighted average for the third quarter of preceding financial year. Hence, the Petitioner shall, at the time of truing up of tariff, furnish the details of the quantity of coal (fuel) as per Regulation 34(2) of 2019 Tariff Regulations. The Petitioner shall not alter or modify any of the columns and lines provided in the forms/ annexures and shall submit the details strictly in accordance with the said forms/ annexures of the 2019 Tariff Regulations.

79. The Petitioner, on a month to month basis, shall compute and claim the energy charges from the beneficiaries based on the formulae as per Regulation 43 of the 2019 Tariff Regulations. Further, the Petitioner is directed to calculate the input price of lignite as per Regulation 36 of the 2019 Tariff Regulations.

Working Capital for O&M Expenses for 1 month

80. The Petitioner in Form-O has claimed the O&M expenses for 1 month in the working capital as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
1984.55	2131.97	2248.26	2342.3	2431.893

81. Regulation 34(1)(a)(vi) of the 2019 Tariff Regulations provide for O&M expenses equivalent to 1 month of the O&M expenses (including water charges and security expenses). Accordingly, O&M expenses equivalent to 1 month of the O&M expenses (including water charges and security expenses) allowed for the period 2019-24 are as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
1983.74	2130.26	2245.57	2338.54	2427.00

82. The difference between the O&M expenses claimed and allowed is due to the fact that we have restricted the additional O&M expenses towards the desalination plant and water charges as discussed in the relevant paragraphs.

Rate of Interest on working Capital

83. In line with Regulation 34(3) of the 2019 Tariff Regulations, the rate of interest on working capital is considered as 12.05% (i.e., 1 year SBI MCLR of 8.55% as on 1.4.2019 + 350 bps) for the year 2019-20, 11.25% (i.e., 1 year SBI MCLR of 7.75% as on 1.4.2020 + 350 bps) for the year 2020-21, 10.50% (i.e., 1 year SBI MCLR of 7.00% as on 1.4.2021/1.4.2022 + 350 bps) for the period 2021-23 and 12.00% (i.e., 1 year SBI MCLR of 8.50% as on 1.4.2023 + 350 bps) for the financial year 2023-24. Accordingly, Interest on working capital has been computed as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for Cost of coal for towards stock **(A)**	12094.59	12094.59	12094.59	12094.59	12094.59
Working Capital for Cost of Coal towards Generation **(B)**	18141.89	18141.89	18141.89	18141.89	18141.89

	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for Cost of secondary fuel oil - 2 months **(C)**	244.00	244.00	243.33	243.33	244.00
Working Capital for Maintenance Spares @ 20% of O&M expenses **(D)**	4760.98	5112.62	5389.37	5612.50	5824.81
Receivables for 45 Days **(E)**	43083.39	42923.48	42660.32	42438.23	42319.63
Working Capital for O&M expenses - 1 month **(F)**	1983.74	2130.26	2245.57	2338.54	2427.00
Total Working Capital (G = A+B+C+D+E+F)	**80308.60**	**80646.84**	**80775.07**	**80869.08**	**81051.92**
Rate of Interest **(H)**	12.050%	11.250%	10.500%	10.500%	12.000%
Interest on Working Capital for annualized (I=G*H)	**9677.19**	**9072.77**	**8481.38**	**8491.25**	**9726.23**

Annual Fixed Charges for the period 2019-24

84. Accordingly, the annual fixed charges approved for the period 2019-24 for the generating station are summarized as under:

(Rs in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	30508.10	30544.09	30544.09	30544.09	30544.09
Interest on Loan	29260.06	26382.49	23455.63	20528.78	17601.92
Return on Equity	34366.31	34408.34	34408.34	34408.34	34408.34
Interest on Working Capital	9677.19	9072.77	8481.38	8491.25	9726.23
O&M Expenses	23804.92	25563.12	26946.84	28062.48	29124.03
Total annual fixed charges	**127616.59**	**125970.80**	**123836.28**	**122034.93**	**121404.60**

Note: *(1) All figures are on an annualized basis. (2) All figures under each head have been rounded. The figure in total column in each year is also rounded. As such, the sum of individual items may not be equal to the arithmetic total of the column.*

85. The annual fixed charges approved as above, is subject to truing-up in terms of Regulation 13 of the 2019 Tariff Regulations.

Application Fee and Publication expenses

86. The Petitioner has sought the reimbursement of fees paid by it for filing the petition for the period 2019-24 and for publication expenses. The Petitioner shall be entitled to reimbursement of the filing fees and publication expenses in connection with the present petition directly from the beneficiaries on a pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

87. Similarly, RLDC Fees & Charges paid by the Petitioner in terms of the Central Electricity Regulatory Commission (Fees and Charges of Regional Load Dispatch

Centre and other related matters) Regulations, 2019, shall be recovered from the beneficiaries. In addition, the Petitioner is entitled to recover the statutory taxes, levies, duties, cess, etc. levied by the statutory authorities in accordance with the 2019 Tariff Regulations.

88. Petition No. 254/GT/2020 is disposed of in terms of the above.

Sd/-	***Sd/-***	***Sd/-***
(Ramesh Babu V.)	**(Arun Goyal)**	**(Jishnu Barua)**
Member	**Member**	**Chairperson**

ANNEXURE IV

FILING FEE FORM I

Central Electricity Regulatory Commission

Regulation 12 of the Central Electricity Regulatory Commission
(Payment of Fees) Regulations, 2012 & Amendments

Form 1

Particulars	
1. Name of the Petitioner/Applicant	**NLC Tamilnadu Power Limited**
2. Address of the Petitioner/Applicant	2 x 500 MW TPS, Harbour Estate,Tuticorin - 628004 Registered Office: No.135, EVR Periyar High Road, Kilpauk, Chennai - 600 010
3. Subject Matter	Fixation of Tariff for the period from 2024-29 Fee for determination of tariff for the year 2024-25
4. Petition No., if any	-
5. Details of generation assets	2 Nos 1000 MW (2 x 500 MW) Unit I: 18.06.2015 , Unit II: 29.08.2015
(a) Generating station/units	
(b) Capacity in MW	
(c) Date of commercial operation	
(d) Period for which fee paid	2024-25
(e) Amount of fee paid	Rs. 44,00,000
(f) Surcharge, if any	Not applicable
6. Details of transmission assets	Not Applicable
(a) Transmission line and sub-stations	
(b) Date of commercial operation	
(c) Period for which fee paid	
(d) Amount of fee paid	
(g) Surcharge, if any	
7. Fee paid for Adoption of tariff for	Not Applicable
(a) Generation asset	
(b) Transmission asset	
8. Application fee for licence	Not Applicable
(a) Trading licence	
(b) Transmission licence	
(c) Period for which paid	
(d) Amount of fee paid	
9. Fees paid for Miscellaneous Application	Not Applicable
10. Fees paid for Interlocutory Application	Not Applicable
11. Fee paid for Regulatory Compliance petition	Not Applicable
12. Fee paid for Review Application	Not Applicable
13. Licence fee for inter-State Trading	Not applicable
(a) Category	
(b) Period	
(c) Amount of fee paid	
(d) Surcharge, if any	
14. Licence fee for inter-State Transmission	Not applicable
(a) Expected/Actual transmission charge	
(b) Period	
(c) Amount of fee calculated as a percentage of transmission charge.	
(d) Surcharge, if any	
15. Annual Registration Charge for Power Exchange/OTC Platform	Not applicable
(a) Period	
(b) Amount of turnover	
(c) Fee paid	
(d) Surcharge, if any	
16. Details of fee remitted	**Online Payment Gateway of CERC e-filing Portal**
(a) Transaction id / Reference No. / Payment id	(3df931b09996079169 88)
(b) Date of remittance	**23-04-2024**
(c) Amount remitted	**₹ 44,00,000**
Signature of the authorized Signatory with Date	Chief Executive Officer NLC Tamil Nadu Power Ltd Harbour Estate, Tuticorin - 4

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Fee Acknowledgement

Counterfoil (Office Copy)

Transaction Id.:	3df931b099960791e988
Payment Gateway ID:	19716544003
Status:	success

Received From :	NLC Tamilnadu Power Ltd (NTPL)		
The Sum of Rs. :	4400000		
Fee Type:	Annual Fees for Determination of Tariff Generating Station(GT)	**Dated :**	Apr 24, 2024, 2:56 PM
Fee Mode:	NEFTRTGS		
Fee Period:	2024-25		
Petitioner/ Organisation Name:	NLC Tamilnadu Power Ltd (NTPL)		

Apr 25, 2024, 9:28 AM

NLC TAMIL NADU POWER LIMITED

Registered Office: No.135, EVR Periyar High Road, Kilpauk, Chennai-600010
CIN: U40102TN2005GOI058050,
Website: www.ntplpower.com, E-mail: cosec.ntpl@nlcindia.in ,
Telephone No: 044-28360027, Fax: 044 - 28360057

Azadi Ka Amrit Mahotsav

SECRET

EXTRACT OF THE RESOLUTION PASSED AT THE 134th MEETING OF THE BOARD OF DIRECTORS OF NLC TAMIL NADU POWER LIMITED HELD AT 16-00 HOURS ON THURSDAY, THE 24TH OCTOBER, 2024 AT THE WISDOM HUB/NLCIL, BLOCK 1, CORPORATE OFFICE, NEYVELI 607 801.

134.14 Appointment of Shri Rajinder Kumar Singh, CPF No. 50684, Deputy General Manager/Finance, NTPL as Chief Financial Officer of the Company – submitted for approval – reg.

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After deliberation, the Board passed the following resolution:

Resolved that approval of the Board of Directors be and is hereby accorded to appoint Shri Rajinder Kumar Singh as the Chief Financial Officer (CFO) of the Company w.e.f 26.10.2024 as per the provisions of Section 203 of the Companies Act, 2013 read with Rule 8 of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 and that the remuneration and terms of employment shall be as per the applicable policy / provisions / guidelines as existing from time to time in respect of the Executive's grade.

Resolved further to authorize Shri Rajinder Kumar Singh to appear and act on behalf and represent the Company in all matters before the Central / State Government / Quasi Government / Statutory authorities, to sign including appending of Digital signatures on various forms / returns / Vakalatnamas / Documents /Agreements etc., and file the same on behalf of the Company before the said authorities.

-/CERTIFIED TO BE TRUE/-

24/10/24

Company Secretary