



Registrar

National Electric Power Regulatory Authority

Islamic Republic of Pakistan

NEPRA Tower, Attaturk Avenue (East), G-5/1, Islamabad
Ph: +92-51-9206500, Fax: +92-51-2600026
Web: www.nepra.org.pk, E-mail: registrar@nepra.org.pk

No. NEPRA/R/ADG(Trf)/TRF-325/TICL-2015/ 8848-52

June 17, 2025

Subject: **Decision of the Authority in the matter of Application for Adjustment in tariff in respect of 20 MW Bagasse based Power Project of Thal Industries Corporation Limited**

Dear Sir,

Please find enclosed herewith the subject Decision of the Authority (total 08 pages) in the matter of Application for Adjustment in tariff in respect of 20 MW Bagasse based Power Project of Thal Industries Corporation Limited in Case No. NEPRA/TRF-325/TICL-2015.

2. The Decision is being intimated to the Federal Government for the purpose of notification in the official Gazette pursuant to Section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 within 30 days from the intimation of this Decision. In the event the Federal Government fails to notify the subject tariff Decision within the time period specified in Section 31(7), then the Authority shall notify the same in the official Gazette pursuant to Section 31(7) of NEPRA Act.

Enclosure: **As above**

Secretary,
Ministry of Energy (Power Division),
'A' Block, Pak Secretariat
Islamabad.


(Wasim Anwar Bhinder)

Copy to:

1. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad
2. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad
3. Chief Executive Officer, Central Power Purchasing Agency Guarantee Limited (CPPA-G), Shaheen Plaza, 73-West, Fazl-e-Haq Road, Islamabad
4. General Manager Commercial, Thal Industries Corporation Ltd., 2 D-1, Gulberg III, Lahore Tele: 042 – 3577 1066-71

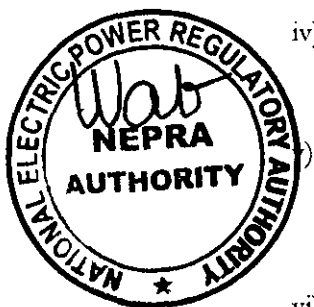
**DECISION OF THE AUTHORITY IN THE MATTER OF APPLICATION
ADJUSTMENT IN TARIFF IN RESPECT OF 20 MW BAGASSE BASED POWER
PROJECT OF THAL INDUSTRIES CORPORATION LIMITED**

INTRODUCTION

1. The Central Power Purchasing Agency (Guarantee) Limited, ("CPPAG") and; Thal Industries Corporation Limited the "Company") with its registered office located at 2D-I, Gulberg-III, Lahore signed an agreement dated March 28, 2025 ("Agreement") for reduction in tariff components. As per clause 2.1 of the agreement, the parties have jointly developed tariff adjustment application as a necessary condition to bring into effect the agreed contractual amendments. CPPA-G has filed a Joint Tariff Adjustment Application ("Petitioners") dated March 28, 2025 before National Electric Power Regulatory Authority (the "Authority") for adjustment in tariff components allowed to the Company through the Authority's determination bearing No. NEPRA/TRF-325/TICL-2015/3845-3847 as adjusted at Commercial Operation date March 09, 2018 as amended and adjusted from time to time.
2. According to the Petitioners, an Energy Purchase Agreement ("EPA") was executed by and between the Petitioners on August 07, 2015 in respect of the Project

GROUND OF APPLICATION

3. The Petitioners have requested the Authority to grant following amendment in the tariff:
 - i) Revise the Fuel Cost component of tariff with effect from October 01, 2021 based on:
 - a. Bagasse price of Rs. 4,500/ton as on October 01, 2021 thereafter 5% annual indexation
 - b. FCC to be calculated at Calorific value of 7000 BTU/kg
 - ii) Reduce the Working Capital Component (WCC) by 50%
 - iii) Fix ROE and ROEDC components at PKR 168/USD with no future USD indexation
 - iv) Indexation of Local O&M shall be allowed as lower of (a) five percent (5%) per annum or (b) the actual average National Consumer Price Index (NCPI) for the preceding twelve (12) months.
Indexation of Foreign O&M shall be allowed PKR/USD depreciation only to the extent of 70% of the actual depreciation per annum. In case, the PKR appreciates against the USD in a year, then 100% of such appreciation shall be passed on to the consumers.
 - vi) The Company may sell electricity to Bulk Power Consumers (BPCs) subject to amendments in its Generation License (GL) and EPA, and upon commitment for payment of compensation to CPPAG for each unit of electricity supplied to the BPCs.
4. **Relevant Clauses of the Agreements signed between CPPAG and the Company**
5. Clause 2.1(a) of the Agreements states that "This Agreement shall become effective on 1st November 2024 (the "Effective Date"), and, section 2.1(d), section 2.1(g), section 2.1(h), section (i) and section



(j) will become operative as of the Effective Date, upon approval from the 'Federal Cabinet, which shall be communicated to the Seller by the Purchaser with supporting evidence."

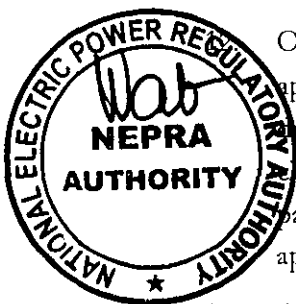
6. The relevant clause referred above pertains to; Fuel Cost Component (clause 2.1(d)), delayed payment rate (clause 2.1(g)), O&M indexation (clause 2.1(h)), sale of energy to Bulk Power Consumers (section 2.1(i)), and rights of Metering Committee for inspection of power plant (clause 2.1(j)).
7. Clause 22 of the Agreements say *"The Parties shall jointly develop a tariff adjustment application to be submitted to National Electric Power Regulatory Authority as a necessary condition to bringing into effect the aforesaid arrangements (the "Tariff Adjustment Application")."*
8. Clause 2.3 of the Agreements says *"The Purchaser shall, within five (5) days from the execution of this Agreement, file the agreed Tariff Adjustment Application with NEPRA. The revised tariff shall be effective from the date of notification (the "Revised Tariff Effective Date")."*
9. Clause 2.4 of the Agreements says *"Subject to the terms of this Agreement, till Revised Tariff Effective Date, the Parties agree that the Seller shall commence giving discount in its invoices consistent with the notified tariff and this Agreement ("Tariff Discounts"). From and after the Revised Tariff Effective Date, billing and invoicing shall be as per the revised tariff."*

Proceedings of Application

10. The Authority considered the application and admitted the same and it was decided to hold hearing in the matter on April 16, 2025. A zoom link was also provided for online audience. Accordingly, advertisement of Notice of Admission/Hearing was published in the national newspapers (Express and Business Recorder) on April 10, 2025. Separate notices to the relevant parties were also sent on April 10, 2025 for participation in the hearing. Hearing was held on April 16, 2025 at 11:00 A.M. at NEPRA Tower Islamabad through Zoom and was attended by representatives of CPPAG, Bagasse IPPs and others.
11. During the hearing the representatives CPPAG presented the case and explained the discounts that have been agreed with the Company. The Authority inquired that whether the mechanism regarding the compensation to be paid by IPPs in case of sale to the BPCs has been agreed. CEO CPPAG clarified that the mechanism for the compensation after meeting the Regulatory requirement has been agreed in the current Agreement while if the IPP sale through grid then whatever wheeling arrangement will be decided by the Authority that will prevail. It was further clarified that this arrangement is to protect consumers since the tariff is front loaded so if the IPP intends to sell to BPCs as allowed under the law then it will have to compensate after meeting Regulatory requirements.

One of the interveners, Arif Bilwani commented that in Pakistan's circumstances, currency appreciation was seen rarely whereas depreciation is often, which means that impact of PKR evaluation will be passed onto consumers. On this comment of Arif Bilwani, CEO CPPAG clarified that earlier the PKR/USD depreciation on O&M foreign component was 100% passed on to the consumer which has now been reduced to 70% only whereas in case of PKR appreciation 100% impact will be passed on to the consumer.

13. Another intervener, Aamir Sheikh, inquired that whether such revision will cause the end consumer to pay additional amount or will it cause any reduction in the tariff. On which it



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was clarified that this Agreement will reduce tariff, the effect of which will be seen in the upcoming quarterly adjustments of DISCOs.

14. No written comments were received on the subject from any commentator

CONSIDERATION OF THE VIEWS OF THE STAKEHOLDERS, ANALYSIS AND DECISIONS ON IMPORTANT ISSUES

15. The issue wise discussion, submissions of stakeholders, analysis and decisions are provided in the succeeding paragraphs.

Fuel Cost

16. According to Clause 2.1(b) of the Agreement, the Petitioners have agreed to change the mechanism for determination of Fuel cost component ("FCC") of the tariff, with effect from October 1, 2021 onwards, the reference price for bagasse shall be Rs. 4,500/ton, and thereafter, there shall be 5% annual indexation on the applicable bagasse price for the previous year. The calorific value of bagasse for the purpose of FCC calculation shall be taken as 7,000 Btu/kg. As per the Petitioners pursuant to Clause 2.1(c) of the Agreement, payment of FCC for the period from October 1, 2021 shall be made as per the revised FCC calculated above; and pursuant to Clause 2.1(d) of the Agreement, FCC for the period from 1st October 2018 to 30th September 2021 as determined by NEPRA shall remain unchanged.
17. The Authority noted that as a result of the revised FCC structure, a corresponding change in tariff will occur — specifically, a reduction in comparison to the existing FCC for the same period. The tariff impact reflects the dual benefit of a lower base price (Rs. 4,500/ton) and an improved calorific value, both of which will be consistently applied in future FCC calculations.
18. Based on the revised reference price of Rs. 4,500/ton effective from October 1, 2021, with the application of 5% annual indexation, the FCC has been allowed for the period from October 1, 2021 to September 30, 2024. Notably, the FCC for the initial period (October 1, 2021 to September 30, 2022) has been computed on the basis of agreed bagasse price of Rs.4,500/ton. From the subsequent year onwards, a 5% annual escalation has been applied.
19. Accordingly, the FCC has been revised as per the request of the Petitioners in view of the revision in Bagasse price and CV of 7,000btu/kg which is tabulated below. The difference between the approved and revised requested FCC is because NEPRA consistently assumed 3412 Btu/kWh theoretical heat rate for a perfectly efficient power plant while computing FCCs of bagasse based IPPs whereas, the Petitioners assumed slightly higher.

Period	Existing FCC	Requested FCC	Allowed FCC
	Rs. /kWh		
1 Oct 2021-30 Sep 2022	11.3187	8.9541	8.9528
1 Oct 2022-30 Sep 2023	11.8846	9.4018	9.4004
1 Oct 2023-30 Sep 2024	12.4788	9.8719	9.8704



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Working Capital

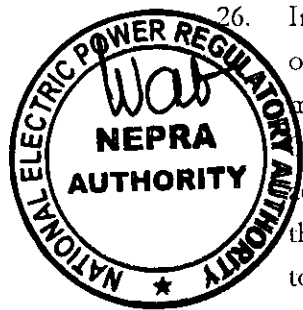
20. According to Clause 2.1(e) of the Agreement, the Petitioners have agreed to reduce the Working Capital Component ("WCC") by fifty percent (50%) w.e.f. November 1, 2024
21. It was noted that the Petitioners have considered the latest indexed WCC of Jul-Sep 2024 quarter i.e. Rs. 0.3338/kWh and then reduced it by 50% which comes out to be Rs. 0.1669/kWh and requested to allow the same. The WCC of Rs. 0.1669/kWh is based on 3 month KIBOR rate of 20.24%. As per the Agreements, the new components shall be effective from 1st November 2024, therefore, the same is approved however the revised component and KIBOR rate of 20.24% shall serve as the reference for indexation purposes with effect from 1st November 2024.

Return on Equity:

22. According to Clause 2.1(f) of the Agreement, the Petitioners have agreed to change the ROE and ROEDC component to seventeen percent (17%) PKR based per annum on NEPRA approved equity at COD calculated at PKR/USD exchange rate of PKR 168/USD with no future USD indexation.
23. It was noted that in the proposed tariff, the CPPAG has stated the revised ROE component of Rs. 1.7106/kWh for the Company. The requested ROE has been calculated by dividing the reference ROE + ROEDC component (Rs. 1.0346/kWh) with the reference ER (Rs. 101.6/kWh) and multiplying it to Rs 168/USD.
24. The Authority noted that the similar provision was agreed in the earlier negotiations with seven (07) bagasse IPPs, wherein ROE component was reduced from 17% (USD based) per annum to 12%, from the date of signing of the Master Agreement for the next 5 years, on the NEPRA approved equity at COD. Whereas on the date of fifth anniversary of the date of execution of Master Agreement i.e. on February 12, 2026, the ROE was to be changed to 17% (PKR based) on NEPRA approved equity at COD calculated at PKR 168/USD, with no future USD indexation throughout the remaining Term.
25. Accordingly, the Authority in its decision dated April 9, 2021 in the matter of application filed by CPPAG for adjustment in component of Tariff pursuant to the Master Agreement with Bagasse IPPs approved the Company's ROE component of Rs 1.7075/kWh to be applicable on fifth anniversary of Master Agreement from February 12, 2026.
26. In the above approved ROE component, the impact of reduced return of 12% on the outstanding ROEDC amount for the 5 years was accounted based on RoEDC redemption model. Now since this ROE component is to be fixed in PKR immediately from November 01, 2024 instead of earlier agreed 5 year period. Accordingly, the revised ROE components accounting for the impact of reduced return of 12% on the outstanding ROEDC amount for the period from the date of effectiveness of earlier Master Agreement i.e. February 12, 2021 to the current effective date of November 01, 2024 has been considered by the Authority which works out as Rs 1.7090/kWh and the same is approved without any USD indexation.

Indexation of Operation & Maintenance Components:

27. As per to Clause 2.1(h) of the Agreement, Operation & Maintenance Components' (the "O&M") as determined by NEPRA (for the quarter ended 30th September 2024) shall continue as revised reference with the following quarterly indexation mechanism:



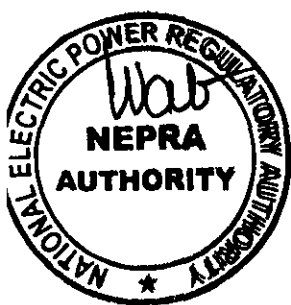
i). Fixed O&M - Local and Variable O&M – Local shall be indexed with lower of (a) five percent (5%) per annum or (b) the actual average National Consumer Price Index (the “NCPI”) for the preceding twelve (12) months.

ii). Fixed O&M - Foreign and Variable O&M – Foreign shall be indexed as per the existing mechanism provided that the PKR / USD depreciation shall be allowed only to the extent of 70% of the actual depreciation per annum. In case, the PKR appreciates against the USD in a year, then 100% of such appreciation shall be passed on to the consumers. For clarification, the indices used in the quarterly indexation determined by NEPRA for the period July-Sep, 2024 shall prevail.

28. The submissions of the Petitioners have been examined. The Application did not clearly specify regarding application of abovementioned mechanism i.e. whether the reference O&M components and indices would be fixed or floating for future indexations. Under current mechanism, the reference values were fixed at the time of COD tariff which have been indexed at each quarter. However, in case of floating references, indexed component and indexed values of each quarter would become reference values for the subsequent quarter.
29. The issue was raised during the hearing in the matter of applications filed by Central Power Purchasing Agency and Independent Power Plants (IPPs) established under power policy 2002 for reduction in tariff components wherein the Authority directed CPPA to submit written clarification on application of indexation mechanism of O&M components with 5% per annum increase or CPI whichever is lower and for foreign components on the basis of exchange rate w.r.t fixed reference component or floating reference component. CPPAG vide email dated April 09, 2025 submitted following response:

“During the negotiations, it was mutually agreed that the reference components of the Tariffs would be maintained on a “floating basis”. This approach was deliberately adopted to mitigate the impact of compounding. Indexation To be made on quarterly basis.”

30. CPPAG, via email dated April 11, 2025, submitted an illustration on O&M indexation, suggesting that quarterly indexation be allowed on the basis of actual NCPI and exchange rate until it cumulatively reaches the maximum annual cap of 5% in NCPI and 70% in Rupee depreciation against US Dollar. Thereafter, no further indexation should be allowed for the remaining quarters of the year. As mentioned above, CPPAG also proposed that the reference components and indices should remain floating to mitigate the impact of compounding.
31. It would be pertinent to mention that under the proposed floating reference mechanism, both the reference and revised indices would change in each quarter, therefore, it would not be possible to accurately implement the agreed indexation mechanism within the maximum limits.
32. Considering the above and in order to mitigate the impact of compounding, the most appropriate approach would be to fix the reference O&M component and the corresponding NCPI for a period of one year. The reference component would be indexed on quarterly basis until either the cumulative increase reaches the maximum limit of 5% or average annual NCPI value, whichever shall be lower. The final indexed component and average NCPI for the preceding year shall serve as the reference for the subsequent year. Similar indexation mechanism shall be applicable for foreign O&M w.r.t. devaluation in exchange rate of up to



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70%. In case of appreciation, 100% shall be passed on to consumers. The revised indexation mechanism shall be effective from November 01, 2024.

Sale of electricity to Bulk Power Consumers (BPCs):

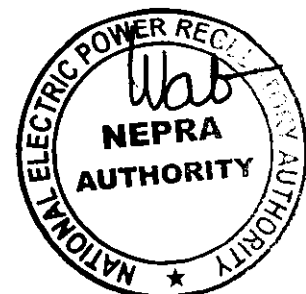
33. According to the Applicant, pursuant to 2.1(i) of the Agreement, the Applicants have agreed that the Company may sell electricity to Bulk Power Consumers (BPCs) subject to amendments in its Generation License and Energy Purchase Agreement, and upon commitment for payment of compensation to CPPAG for each unit of electricity supplied to the BPCs, in accordance with the mechanism stipulated in Annexure-A of the Agreement.
34. Final decision to allow such sales to BPCs by Bagasse plants will only be possible after having Generation License modification to be approved by NEPRA under the law on case to case basis.

Sharing Mechanism beyond Net Annual Plant Factor:

35. It is stated in the Application that in pursuance to clause 2.5 of the Agreement, the Petitioners have agreed that if the Seller operates above the annual 45% plant factor (the "Average PF") in a year, the Purchaser shall pay 100% of the Variable Energy Purchase Price and 30% of the Fixed Energy Purchase Price for energy produced above 45% plant factor.
36. The Petitioners submitted that provided however, for every five (5) year period starting from the Commercial Operation Date (after which a fresh reset shall be done to re-start the new five (5) year period), if the Seller operates below the Average PF in any year ("Actual Shortfall PF"), the difference between the Average Shortfall PF and Actual PF shall be carried forward to the next year(s). In case the Seller operates above the Average PF in subsequent years, the Purchaser shall pay one hundred percent (100%) of the Variable Energy Purchase Price and one hundred percent (100%) of the Debt Service Component as per the Tariff out of the Fixed Energy Purchase Price for the energy purchased above the Average PF to the extent of the shortfall energy occurring in previous years, after which one hundred percent (100%) of the Variable Energy Purchase Price and thirty percent (30%) of the Fixed Energy Purchase Price shall be paid.
37. The Petitioners further submitted that if the Seller operates above the Average PF in any year ("Actual Surplus PF"), and in a subsequent year(s) there is a Actual Shortfall PF, then to the extent of the Actual Shortfall PF upto maximum of Actual Surplus PF, the Purchaser shall pay one hundred percent (100%) of the Debt Service Component as per the Tariff out of the Fixed Energy Purchase Price after deducting 30% of fixed cost, if any, already paid on that Actual Surplus PF). Except for the adjustments requested hereinabove, all other terms and conditions of the Tariff shall remain unchanged.
38. It was noted that this modification in the sharing mechanism bring more clarity and consumer protection hence approved
39. **ORDER**

- I. The Authority hereby modify and approve its earlier decision(s) in the matter of Thal Industries Corporation Limited the extent of following:

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Tariff Component	Revised Ref Tariff - Rs/kWh	Indexation
V O&M-L	0.2835	Lower of 5% per annum or actual average NCPI for the preceding 12 months
F O&M-L	0.7569	
V O&M-F	1.1147	US CPI & PKR/US\$ provided that 70% PKR/US\$ depreciation and 100% PKR/US\$ appreciation is applicable.
Working Capital	0.1669	KIBOR
Return on Equity	1.7090	No Indexation

Fuel Cost Component:	Rs/kWh	Indexation
1 st Oct 2021 to 30 th Sep 2022	8.9528	5% annual indexation on previous year tariff
1 st Oct 2022 to 30 th Sep 2023	9.4004	
1 st Oct 2023 to 30 th Sep 2024	9.8704	

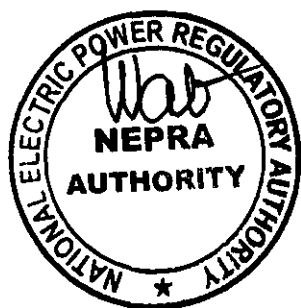
Reference Parameters:	Values
Exchange Rate (PKR/US\$)	278.80
US CPI (All Urban Consumers)	314.069
N CPI (Local)	254.78
3 Months KIBOR	20.24%

II. The O&M indexation mechanism is also modified to the following extent:

- Local O&M components (Variable and Fixed) shall be indexed on quarterly basis until either the cumulative increase reaches the maximum limit of 5% or average annual NCPI value, whichever shall be lower. The reference values for the entire year shall remain fixed. The final indexed component and average NCPI for the preceding shall serve as the reference for the subsequent year.
- Foreign O&M components (Variable and Fixed) shall be indexed quarterly on the basis of 70% of the cumulative rupee devaluation against US dollar. In case rupee appreciates against US Dollar, 100% of the same shall be passed on to the consumers. The reference values for the entire year shall remain fixed. The final indexed component and exchange rate at the end of the year shall serve as the reference for the subsequent year.
- The indices used in the quarterly indexation determined by NEPRA for the period July – September 2024 shall prevail as reference for the first year's indexation.

III. The indexation of Cost of Working Capital component will be referenced at KIBOR of 20.24%.

IV. The revised tariff components along with revised indexations shall be effective from November 01, 2024.

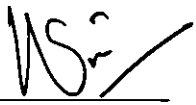


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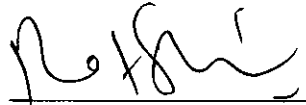
NOTIFICATION

The above Order of the Authority is intimated to the Federal Government for notification in the Official Gazette in terms of Section 31(7) of the **Regulations of Generation, Transmission and Distribution of Electric Power Act, 1997**.

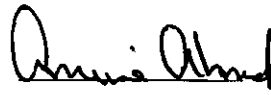
AUTHORITY



Waseem Mukhtar
Chairman



Engr. Rafique Ahmed Shaikh
Member



Amina Ahmed
Member



Engr. Maqsood Anwar Khan
Member

