

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/TRF-600/KAPCO-2023/ 5203-07-

April 09, 2025

Subject: Decision of the Authority in the matter of Provisional Tariff request filed by Kot Addu Power Company Limited

Dear Sir,

Please find enclosed herewith the subject Decision of the Authority (total 07 Pages) along with Additional Note of Mr. Rafique Ahmad Shaikh, Member(NEPRA) regarding grant of Provisional tariff requested by Kot Addu Power Company Limited in Case No. NEPRA/TRF-600/KAPCO-2023.

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

(Wasim Anwar Bhinder)

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

Copy to:

- 1. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad.
- 2. Secretary, Ministry of Finance, 'Q' Block Pak Secretariat Islaambad
- 3. Chief Executive Officer, Central Power Purchasing Agency Guarantee Limited (CPPA-G), Shaheen Plaza, 73-West, Fazl-e-Haq Road, Islamabad
- 4. Chief Executive Officer, Kot Addu Power Co. Ltd. (KAPCO) 5-B/3, Gulberg-III, Lahore



DECISION OF THE AUTHORITY IN THE MATTER OF PROVISIONAL TARIFF REQUEST FILED BY KOT ADDU POWER COMPANY LIMITED

1. INTRODUCTION

- 1.1. Kot Addu Power Company Limited (KAPCO) was incorporated on April 25, 1996, as a public limited company under the Companies Ordinance, 1984 for the purposes of acquiring, operating and maintaining a 1600 MW (name plate capacity) multi-fuel-based generation facility/combined cycle thermal power plant, located at Kot Addu, District Muzaffargarh, Punjab, Pakistan (the "Project"). The Petitioner has been operating and maintaining the Project for more than 25 years.
- 1.2. The Project comprises of a generation facility that was divided into 3 energy blocks, with each block having a combination of gas and steam turbines and, a switchyard facility. However, the Project is now classified into: Plant 1, Plant 2 and a switchyard facility connecting to 12 transmission lines and 4 autotransformers at 132kV/220kV levels (the "Switchyard Facility").
- 1.3. NEPRA granted Generation License (No. PGL/020/2004 dated September 22, 2004) to Kot Addu Power Company for a period of 17 years which expired on September 21, 2021. KAPCO vide letter dated June 24, 2021 requested for extension of term of its Generation License. NEPRA vide its determination dated September 08, 2022 extended the term of its Generation License upto September 21, 2024 i.e. for a period of 3 years.
- 1.4. KAPCO entered into a Power Purchase Agreement (PPA) with WAPDA for sale of electric power from its 1600 MW multi-fuel based thermal generation facility at Muzaffargarh. The said PPA was for a period of 25 years commencing from June 27, 1996 which expired on June 26, 2021. On February 15, 2021, the PPA was novated to CPPA-G as Power Purchaser. As per third amendment in PPA dated February 11, 20221 signed between KAPCO and WAPDA the term of PPA was extended for 485 days effective from June 27, 2021 which expired on October 24, 2022.
- 1.5. KAPCO vide letter dated October 24, 2022 submitted a Tariff Petition for determination of Reference Generation Tariff for its 1600 MW thermal power generation facility which was returned through NEPRA letter dated November 28, 2022 due to insufficiency of information

2. FILING OF TARIFF PETITION

2.1. KAPCO submitted a petition for determination of reference generation tariff and switchyard charges for five years. The petitioner proposed following tariff for its generation facilities:

Fuel	Energy Blocks	Energy Purchase Price PKR/kWh	Capacity Purchase Price @30% Load Factor PKR/kW/h	Total Reference Tariff PKR/kWh	
		Plant 1			
Gas/RLNG	Block I	28.4578		33.7514	
	Block IIA	30.6851	5.2936	35.9787	
	Block IIB	30.1558		35.4494	
	Block I	23.4265		28.8049	
LSFO	Block IIA	24.9567	5.3784	30.3351	
	Block IIB	24.5277		29.9061	
I IOD	Block I	64.3231	5,3589	69.6820	
HSD	Block IIA	69.3862	3.5569	74.7451	

1/7





Fuel	Energy Blocks	Energy Purchase Price PKR/kWh	Capacity Purchase Price @30% Load Factor PKR/kW/h	Total Reference Tariff PKR/kWh				
	Block IIB	68.6640		74.0229				
	Plant 2							
	Block IIC	30.3166	4.7231	<u>35.039</u> 7				
Gas/RLNG	Block III	32.0890	4.7231	36.8121				
	Block IIC	24.8629	4.6736	29.5365				
LSFO	Block III							
	Block IIC	68.8500	4.8306	73.6806				
HSD	Block III	72.4878	4.8300	77.3184				

2.2. Notice of Admission along with salient features of the petition was made public on June 15, 2023 inviting comments from various stakeholders. Pending decision in the subject matter following provisional tariff was issued on August 04, 2023 on Take and Pay basis:

	Dissis	Interim Tariff	
Components	Block	Rs./kWh	
	I	26.8647	
Fuel Cost Component Gas/RLNG	II	29.4660	
	I	21.1214	
Fuel Cost Component LSFO	п	23.1810	
	I	0.6357	
V O&M Gas/RLNG	II	0.6340	
	I	1.1027	
V O&M LSFO	II	1.3643	
Fixed O&M Gas/RLNG	I, II	0.4232	
Fixed O&M LSFO	I, II	0.4395	
Cost of Working Capital Gas/RLNG	I, II	0.4183	
Cost of Working Capital LSFO	I, II	0.3899	
ROE Gas/RLNG	I, I <u>I</u>	0.3388	
ROELSFO	I, II	0.3519	
	I	28.6807	
Total Gas/RLNG	II	31.2804	
	I	23.4053	
Total LSFO	II	25.7266	

- 2.3. Ministry of Energy vide letter dated January 30, 2025 submitted that the Cabinet vide its decision dated 14-01-2025 approved following (among others):
 - Advise NEPRA to consider and issue the tariff determination in respect of KAPCO to the extent of NTDC requirement in the grid on filing of tariff modification petition by KAPCO
 - Approve draft Tripartite PPA and authorize NTDC and CPPA to execute the agreement with KAPCO after incorporating above and make any project specific changes required.

3. FILING OF ADDENDUM TO TARIFF PETITION

3.1. KAPCO vide letter No. KAPCO/CEO/2025/514 dated February 12, 2025 submitted Addendum to the subject tariff petition containing revision in key terms and conditions. The petitioner submitted as



²/7



"For all matter pertaining to the Generation Facility, please note that the terms of the Addendum shall prevail over the Tariff Petition and other ancillary documents. The references to concepts/components revised below shall stand replaced in the Tariff Petition and other ancillary documents and are to be construed according to the Addendum."

<u>_</u>	Energy Purchase Price			Capacity Purchase Price					
Fuel	FCC	Variabl e O&M	Total EPP	Fixed O&M	сwс	ROE	Insurance	Total	Total Reference Tariff
	PKR/kWh			PKR/kW/h				PKR/kWh	
Gas/RLNG					_				
Energy Block I	28.0460	0.8692	28.9152	0.6774	0.1545	0.3388	0.2151	1.3858	30.3010
Energy Block II	30.5956	0.9992	31.5948						32.9806
LSFO			-						
Energy Block I	29.5862	0.8692	30.4554	0.7015	0.1600 0.	0.2510	0.2227	1,4361	31.8915
Energy Block II	32.0417	0.9992	33.0409			0.3519	0.2227		34.4770

3.2. The petitioner proposed following tariff for its generation facilities:

3.3. ROE is @ 84.4% load factor, requested to be paid on Take or Pay basis till twenty-five percent (25%) of availability and for any generation above this limit, to be based on actual generation. Reference Gas/RLNG price of Rs. 3,442.7794 per MMBTU and LSFO price of Rs. 150,817.50/ton (including transportation charges) has been assumed.

4. REQUEST FOR PROVISIONAL / INTERIM TARIFF

- 4.1. The petitioner vide letter No. KAPCO/CEO/2025/523 dated March 17, 2025 requested the Authority to grant provisional approval of tariff, allowing the petitioner to supply power from the Generation Facility to the Power Purchaser during the period commencing from the date of determination of Provisional Tariff Approval till the time that the Authority arrives at its final determination with regards to the Addendum (the "Interim Period).
- 4.2. According to the petitioner, it is pertinent to mention that IGCEP 2022-31 was approved by the NEPRA Authority on February 01, 2023, wherein it has been determined that a minimum of 500 MW dispatch is required from the Generation Facility till 2026. However, the petitioner could not make the Generation Facility operational awaiting decision of tariff, the GL and signing of the PPA. The Generation Facility has been retained in the system as per requirement by NTDC as precondition for the termination of contract with AES Pak Gen power plants. Copy of the Ministry letter dated November 6, 2024 is attached with interim tariff request.
- 4.3. According to the petitioner, during the recent negotiations with IPPs, NTDC has emphasized that the benefits of KAPCO includes providing relief to 500/220 KV transformers at Muzaffargarh and Multan 500 KV substations in summer season, reactive power support for voltage control and system stability to the grid system. The limited capacity (500 MW) from KAPCO have multi fuel operation capability on RLNG/LSFO and these units are more efficient and better position in Economic Merit Order than Pak Gen. KAPCO was retained in the system as viable alternative of Pak Gen as it has high efficiency 46.44% (347 MW block-1) VS 38% efficiency of Pak Gen (345 MW). After negotiations, Ministry conveyed that based on the recommendations from NTDC, it has been decided to terminate Pak Gen while retaining KAPCO. It was further advised that KAPCO PPA be finalized and submitted by 150 Obsected and submitted by 150 Obsected 24, 2024. Copy of Ministry letter dated December 20, 2024 is attached. The MOE vide its





letter dated February 14, 2024 intimated that Cabinet has approved the tri-partite PPA and advised KAPCO to proceed on the matter after fulfilment of legal and regulatory requirement.

- 4.4. The petitioner also referred the minimum 500 MW approval of KAPCO in the IGCEP 2022-31 (till 2026) and PAP. According to the Petitioner, NTDC has submitted draft IGCEP 2024-34 to NEPRA wherein KAPCO has been retained in the system till 2027 as per system operator requirement. The Petitioner further submitted that Cabinet has approved the tri-partite PPA for 3 years aligned with the requirements established in the current draft IGCEP.
- 4.5. The approval for the interim period was requested on the following basis:
 - The petitioner submitted that with the upcoming peak summer season, overloading of auto transformers is anticipated due to increased electricity demand, especially in the MEPCO region. NTDC has emphasized that the benefits of KAPCO includes providing relief to 500/220 KV transformers at Muzaffargarh and Multan 500 KV substations in summer season, reactive power support for voltage control and system stability to the grid system. The limited capacity (500 MW) from KAPCO have multi fuel operation capability on RLNG/LSFO and these units are more efficient and better position in Economic Merit Order than Pak Gen.
 - Considering the urgent situation stated above we propose that the provisional tariff approval for the interim period be kindly granted by the Authority for the generation facility. Federal Govt wants us the readiness of the plant by mid-April end as Pak Gen has been terminated and so if we have tariff and valid license, we can enter into PPA and sales of power to CPPAG to comply with Cabinet decision.
 - On granting of the provisional tariff approval by the Authority, the petitioner shall invoice the Power Purchaser, and the Power Purchaser shall make payments to the petitioner, on the basis of reference generation tariff proposed in the Addendum. To this extent, the petitioner offers that the testing of requested heat rates shall be undertaken by an Independent Engineer, an adjustment shall be applied retrospectively.
- 4.6. The petitioner further requested the Authority to expeditiously approve the reference generation tariff provisionally as proposed in the Addendum, enabling the generation facility to successfully supply power to the MEPCO region which will reduce load shedding, increase system reliability and stability by providing reactive power for voltage control in the surrounding areas and support the system through other ancillary services like black start capability.
- 4.7. It is pertinent to mentioned that KAPCO has already been granted provision tariff vide decision of the Authority dated 4th August 2023 which is still applicable. The petitioner was asked to elaborate on the necessity for a revised provisional tariff. In response KAPCO vide E-mail dated 20th March 2025 submitted as under:
 - We acknowledge the discussion held last week regarding the PPA sign-off with CPPA-G based on the provisional tariff granted by NEPRA on August 4, 2023. As per CPPA-G's position, they are unable to enter into the PPA on the basis of this provisional tariff, as it was granted prior to negotiations with the National Task Force.
 - CPPA-G has reiterated that the tariff should align with the Terms and Conditions agreed upon during negotiations with the Task Force as outlined in KAPCO's letter dated January 1, 2025. The same has been approved by the cabinet along with draft tri-partite agreement (PPA).



4/7





• In light of this, we request NEPRA to grant the provisional tariff in accordance with the Addendum to Tariff Petition dated February 12, 2025, enabling us to proceed with the PPA sign-off with CPPA-G.

5. ANALYSIS ON THE REQUEST OF THE PETITIONER

5.1. The request of provisional tariff has been examined. The approved interim/provisional tariff was granted under Rule 4(7) of the Tariff Rules which is reproduced hereunder:

"The Authority may, while admitting a petition, allow the immediate application of the proposed tariff subject to an order for refund for the protection of consumers, or for satisfactory security to be provided for refund, while the proceedings are pending before the Authority."

- 5.2. The Authority noted that as per NEPRA Act, for determination of tariff, a minimum period of four months is provided and during that period the electricity being generated by the subject plant would continue to be supplied to the consumers and in the absence of approved tariff the payment shall keep on accumulating.
- 5.3. Therefore, keeping in view the above and the concerns raised by CPPA-G on the approved interim tariff, the request of revised interim tariff is justified. Accordingly, the Authority has decided to accept the request of KAPCO for allowing provisional tariff which shall be subject to final decision on the proceedings pending before the Authority.

ORDER

Components	Block	Gas/RLNG	LSFO	
Energy Purchase Price (Rs. /kWh)	I 			
_ 1	1	28.0460	29.5862	
Fuel Cost Component	II	30.5956	32.0417	
	I	0.8692		
V O&M	П	0.9992		
Capacity Purchase Price (Rs. /kW	/h):			
Fixed O&M	î, II	0.6774	0.7015	
Cost of Working Capital	I, II	0.1545	0.1600	
ROE	I, II	0.3388	0.3519	
Insurance	I, II	0.2151	0.2227	
	I	30.3010	31.8915	
Total Tariff	п	32.9806	34.4770	

5.4. The revised provisional tariff shall be as under:

- I. The application of provisional tariff shall be subject to following conditions:
 - i. As requested in the Addendum, KAPCO shall be entitled to received 25% ROE on Take or Pay basis while the remaining ROE shall be linked with actual dispatch exceeding 25%.







- The fuel cost components have been worked out on the basis of LSFO Price of Rs. 150,817.50/Ton including transportation charges and Gas/RLNG price of Rs. 3,442.78/MMBTU. The fuel cost components shall be subject to adjustment for variation in fuel price
- iii. The despatch shall be on economic merit order.
- iv. The revised provisional tariff shall supersede the approved provisional tariff dated 4th August 2023.
- v. The above provisional tariff shall take effect from the date of issuance of the instant decision.

NOTIFICATION

The above Order of the Authority is to be notified in the Official Gazette in accordance with the provision of Section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act 1997.

AUTHORITY

Mathar Niaz Rana (nsc) Member

1 the

Engr. Maqsood Anwar Khan Member

My assistional (hissel is added.

Engr. Rafique Ahmed Shaikh Member

Amina Ahmed Member

Waseem Mukhtar Chairman

6/7



Additional Note of Member (Technical) - Interim Tariff Request filed by KAPCO

It is a well-established fact that the installed generation capacity in the CPPAG system, as of June 2024, totalling around 42,512 MW, including around 25000 MW of thermal generation, exceeds the current demand. The utilization of thermal generation capacity in the past two financial years, FY 2023 and FY 2024, remained at around 32% and 29%, respectively. Furthermore, a significant portion of this surplus capacity available in pool is more cost-effective than the proposed interim tariff by KAPCO. Additionally, it is important to note that this is not the first time the case for extending the operation of KAPCO power plant has been presented to the Authority. Previously, the Authority approved an extension of 485 days for this plant.

It is important to note that, when renewing the Generation License for KAPCO on September 8, 2022, for a period of three years, the Authority explicitly directed the NTDC and MEPCO to resolve the identified technical issues within this timeframe. These issues were causing KAPCO to operate in violation of the Economic Merit Order (EMO). Unfortunately, despite the clear direction from the Authority, and with only six months remaining in the three-year period, the situation has not improved as required.

It is relevant to highlight that, on one hand, all stakeholders are working diligently to eliminate costly "Take or Pay" generation capacity. On the other hand, the extension for operation of KAPCO's more expensive generation capacity is being proposed on a "Take or Pay" basis, citing transmission and grid constraints. Moreover, it is worth mentioning that the 4,000 MW HVDC line, built to transfer cheaper generation from the south to the north, is operating at a low utilization rate (around 38 % during FY 2024) despite the full capacity payment charges being paid for.

The failure to address these issues has resulted in a situation where the country is unable to optimally utilize its more economical and indigenous energy resources in the South, primarily due to the limitations of the transmission system. Consequently, we find ourselves reinvesting in outdated and inefficient generation capacity, further exacerbating the problem.

These facts highlight significant flaws in both the planning and execution of power generation and transmission system projects. It is unfair to shift the burden of these inefficiencies onto electricity consumers, particularly when these issues stem from inadequate planning and execution by the power transmission company.

In light of the responsibilities outlined for power transmission company, including NTDC and DISCOs in NEPRA Act and Applicable Documents, I am of the considered opinion that the interim tariff should be granted to this company strictly on a "Take and Pay" basis. However, whenever this plant operates in violation of the Economic Merit Order (EMO), the differential cost between the available cheaper generation and the cost of generation from the plant operated in violation of EMO should not be passed on to electricity consumers. Instead, this cost should be borne by the entities responsible for providing a constraints-free transmission system.

