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### National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/ADG(Trf)/TRF-358/NPPMCL-2016/ //640-44

July 30, 2025

Subject:

<u>Decision of the Authority in the matter of joint application filed by CPPA-G for reduction in tariff components of Haveli Bahadur Shah Project of National Power Parks Management Company Limited</u>

Dear Sir,

Please find enclosed herewith the subject Decision of the Authority (total 07 page) in the matter of joint application filed by CPPA-G for reduction in tariff components of Haveli Bahadur Shah Project of National Power Parks Management Company Limited in Case No. NEPRA/TRF-358/NPPMCL-2016.

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, Islamabad.
- 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, National Power Parks Management Company (Pvt.) Ltd. Second Floor 7-C-1, Gulberg-III, Lahore



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# DECSISION OF THE AUTHORITY IN THE MATTER OF JOINT APPLICATION FILED BY CPPA-G FOR REDUCTION IN TARIFF COMPONENTS OF HAVELI BAHADUR SHAH PROJECT OF NATIONAL POWER PARKS MANAGEMENT COMPANY LIMITED

#### 1. INTRODUCTION

1.1. Central Power Purchasing Agency (Guarantee) Limited (CPPA-G) signed Negotiated Settlement Agreement (NSA) dated April 08, 2025 with National Power Parks Management Company Limited (NPPMCL) for its Haveli Bahadur Shah power project.

#### 2. FILING OF APPLICATIONS

- 2.1. CPPA-G vide letters dated April 14, 2025 filed joint application for reduction in tariff components pursuant to the NSA on following grounds:
  - i. O&M indexation mechanism
  - ii. Maximum limit of insurance premium
  - iii. Foreign ROE and ROEDC components
  - iv. Hybrid Take and Pay model for ROE

#### 3. **HEARING**

3.1. Public hearing in the matter was held on April 24, 2025 which was attended by the representatives of CPPA-G and power plant.

#### 4. POST HEARING COMMENTS OF STAKEHOLDERS

- 4.1. The Korangi Association of Trade and Industry (KATI) vide letter dated April 19, 2025 submitted following comments:
  - We appreciate NEPRA's initiative to revisit the tariff structure of key government owned combined cycle power plants including Balloki, Haveli Bahadur Shah, Guddu (747 MW) and Nandipur. The proposed revisions in indexation, insurance and capacity charges are timely and aligned with the objective of reducing end-user electricity costs.
  - However, the core issue that continues to prevent these highly efficient plants from securing a higher position in the merit order is the high fuel cost of RLNG, currently exceeding USD 13.48/MMBtu, equivalent to approximately Rs.3,774/MMBTU. This translates into a per unit generation cost of Rs. 26 27 which remains economically uncompetitive despite these plants having world class heat rates and low operational downtime
    - As we all know after the imposition of levy, Captive power using 350 MMCFD Pipe Line Gas will now eventually shift to grid. To enable these Turbine plants to





contribute meaningfully to the national energy mix, we strongly recommend the blending of RLNG with domestic pipeline gas which is priced at Rs. 1,050 to Rs. 1,778 per MMBTU for the power sector. A 50:50 fuel blend would yield an effective fuel cost of Rs. 2,412 /MMBTU, bringing per unit electricity cost down to approximately Rs. 16.88 and generating savings of Rs. 9-10 per unit

- This same mechanism must also be extended to K-Electric's BQPS-III, a modern 900 MW RLNG based combined cycle plant. Currently, the high RLNG cost at BQPS-III contributes significantly to elevated Fuel Cost Adjustments (FCA) in Karachi. By adopting a fuel blending strategy and supplying cheaper pipeline gas, the following benefits can be achieved:
  - ✓ Fuel cost per unit at BOPS-III would reduce from Rs. 26 to Rs 16-17
  - ✓ Karachi's monthly FCA burden would drop, easing pressure on residential, commercial and industrial consumers
  - ✓ For even BQPS-II, which is a 47.47% efficient plant such a blend could be introduced.
  - ✓ The national government would save billions in annual KE subsidy payouts.
  - ✓ Dispatch of BQPS-III would become more consistent and merit aligned
- Based on BQPS-III's capacity and operational utilization (~80%), monthly fuel savings from blending would be approximately Rs. 5 6 Billion, purely from Karachi's power generation.
- Following policy actions are proposed for NEPRA's consideration
  - ✓ Recommend a formal fuel blending policy to the Ministry of Energy to enable RLNG-based plants to receive a mixed gas supply for economic dispatch
  - ✓ Adjust tariff benchmarks for government owned and K-Electric plants to reflect the expected lower blended fuel cost
  - ✓ Allocated up to 350 MMCFD of domestic pipeline gas, freed up through the recent levy on captive plants to these efficient generation facilities
  - ✓ Ensure pipeline gas is prioritized for BQPS-III, as Karachi lacks alternate generation options and depends heavily on KE's base load plants
  - ✓ Monitor real-time merit order dispatch to guarantee least-cost dispatch, particularly, as these plants become cost effective through blending
- Lastly, we would like to emphasize that even a modest increase in domestic gas prices for non-priority consumers (by ~33%) is both absorbable and socially







acceptable, especially if it enables an electricity cost reduction of Rs. 2-3/unit countrywide. Given that electricity forms a far larger share of household and industrial energy bills than gas, this trade-off would result in net savings and promote energy efficiency without political backlash.

## 5. <u>CONSIDERATION OF THE VIEWS OF THE STAKEHOLDERS, ANALYSIS AND DECSISION</u>

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

#### a) Indexation of O&M Components

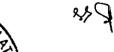
5.2. The O&M components as determined by NEPRA (for the quarter ended December 31, 2024) shall continue as revised reference with the following indexation mechanism:

#### i. Local O&M

5.3. As per the applications, Fixed 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 (NCPI) for the preceding twelve months.

#### ii. Foreign O&M

- 5.4. As per the applications, Fixed 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 actual depreciation per annum. In case the PKR appreciates against USD in a year, then 100% of such appreciation shall be passed on to the consumers.
- 5.5. The submissions of the applicants have been reviewed. It would be pertinent to mention that same mechanism was requested in the joint applications filed by CPPA-G and IPPs for reduction in tariff component. Accordingly, in line with IPPs, the Authority has decided to approve following indexation mechanism for O&M components:
  - a) 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.
  - b) 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.





5.6. The revised indexation mechanism shall be effective from January 01, 2025.

#### b) Insurance

- 5.7. As per the application, the maximum insurance cap has been revised to 0.8% of the sum insured. Actual insurance cost shall be allowed subject to maximum limit.
- 5.8. The submissions of the applicants have been reviewed. The Clause 2.2(a)(xii) of the NSA dated April 08, 2025 states that:

"From the Effective Date, the Parties agree that the Insurance Component of CPP shall be Pass-Through Item subject to a maximum limit to be capped at 0.8% of sum insured as per the provision of PPA. Provided however that the Company shall ensure the participation of Power Purchaser being an observer in the, entire procurement process of insurance. Further, NICL holds the first right of placement of operational phase insurance and shall inform the Company and Power Purchaser for its inability to place insurances within the allowed limits. In case NICL is unable to procure the insurance within the allowed cap of 0.8% of the sum insured, the Company shall proceed to place insurance under relevant laws independent of NICL."

5.9. The revised maximum limit is on the basis of % of sum insured as against the earlier mechanism of % of EPC cost. This is an exceptional treatment which does not exist in any other IPP. The comparison of insurance premium as per existing and revised maximum limit is provided hereunder:

Power Plant	Insurance Premium @ Insurance Premium 1% of Allowed EPC 0.80% of Sum Insurance		
	US\$ in Millions		
NPPMCL - HBS	5.34	9.97	

<sup>\*</sup>As per information submitted by NPPMCL

5.10. As provided above, the insurance limit has been revised upwards from the existing approved limit. The revised insurance is part of a package deal between CPPA-G and power plant, wherein certain tariff components particularly the ROE have been substantially reduced and restricted, therefore, considering the overall reduction in tariff, the Authority has decided to approve the requested maximum limits of insurance premium.

#### c) Foreign ROE Component

- 5.11. As per the application, the foreign component of ROE and ROEDC as determined by NEPRA for the Oct-Dec 2024 quarter shall be recomputed based on 13% rate of return, at the fixed exchange rate of PKR 168 / USD. Thereafter, there shall be no exchange rate indexation.
- 5.12. The applicants further requested to update the revised components on the basis of NEPRA determination dated February 03, 2025, March 27, 2025 and NEPRA's determination to be announced on application of NPPMCL for indexation of tariff.





5.13. The submissions of the applicants have been examined. As per information sought from CPPA-G, the requested ROE component is based on following parameters and have not accounted for redemption of ROEDC and revised equity investment vide decisions dated February 03, 2025:

Description	Unit	HBS	
Equity	US\$ Mil	227.11	
ROEDC approved at COD	US\$ Mil	23.34	
Return (%)	%	13%	
Exchange Rate	Rs. /US\$	168	
ROE Component	Rs. /kW/h	0.5151	

- 5.14. Currently, 12% IRR with dollar indexation is allowed in line with CCOE's decision dated August 27. 2020. The Authority vide its decision dated May 20, 2020 approved reference ROE component of Rs. 0.3971/kW/h on the basis of IRR of 16%, equity of US\$ 227.11 Million and ROEDC of US\$ 23.34 Million. Subsequently, in compliance with the CCOE's decision dated August 27, 2020, the Authority revised ROE component to Rs. 0.2912/kW/h vide decision dated February 18, 2021 on the basis of IRR of 12%, equity of US\$ 227.11 Million and recomputed ROEDC of US\$ 17.41 Million.
- 5.15. This approach was inconsistent with the mechanism adopted at that time for revision in ROEs of thermal IPPs established under the 2002 power policy, wherein the ROEDC approved at the time of COD was not recomputed at revised rate of return. Instead, the outstanding ROEDC as on effective date of revision was used to calculate annuity on revised return. Moreover, in recent joint applications submitted by CPPA-G and IPPs for reduction in tariff components, the foreign ROE and ROEDC components of Attock Gen, Foundation Daharki, Saif Power and Sapphire Electric were also revised using the outstanding ROEDC amount as on the effective date of the agreement.
- 5.16. Accordingly, in order to ensure consistency and fairness, the revised ROEDC amount has been recalculated on the basis of ROEDC approved in COD true up reduced by the redeemed ROEDC till effective date for computation of revised ROE component. Moreover, the Authority vide its decision dated February 03, 2025 approved revised equity of US\$ 230.48 Million for HBS and the same has also been considered. The parameters along with revised ROE component is provided hereunder:

Description	Unit	Values
Construction Period	Months	26
Equity	US\$ Mil	230.48
Outstanding ROEDC	US\$ Mil	22.52
Return (%)	%	13%
Exchange Rate	Rs. /US\$	168
ROE Component		0.5219
Requested ROE	Rs./kW/h	0.5151
Difference		0.0068





- 5.17. The above calculation was shared with CPPA-G vide email dated June 03, 2025 for review and comments. Reminder email in the matter was sent on June 11, 2025, however, no comments were received from CPPA-G.
- 5.18. The comparison of existing and revised ROE component is provided hereunder:

D DY 4	Fuel	Existing	Revised	Difference	
Power Plant		(Rs. /kW/h)		(%)	
NPPMCL – HBS	RLNG	0.7706	0.5219	(32%)	
	HSD	0.8793	0.5956	(32%)	

5.19. Keeping in view the above discussions, the Authority has decided to revise ROE component on the basis of return of 13% and fixed exchange rate of Rs. 168/US\$ with no further indexation in future. The revised ROE component shall be effective from January 01, 2025

#### d) Hybrid Take and Pay Model

- 5.20. As per the application, the Parties have agreed to implement a 'Hybrid Take-and-Pay Model'. The plant will be entitled to 35% of the revised ROE component (including ROEDC) of tariff as part of CPP which will be computed as per the existing terms of the PPA. In case the despatched and delivered Net Electrical Output (NEO) exceeds 35% of the total contract capacity in terms of kWh, then IPPs will be entitled to receive ROE component of tariff which shall be calculated on the actual NEO exceeding 35% of the total contract capacity in terms of kWh and IPPs shall claim the differential CPP accordingly.
- 5.21. The submissions of the applicants have been reviewed. The arrangement has been mutually agreed between the parties and is in the interest of the consumers and also in tline with the mechanism adopted in case of IPPs. Accordingly, the same is being approved.

#### 6. ORDER

I. The Authority hereby modify and approve its earlier decisions in the matter of Haveli Bahadur Shah Project of National Power Parks Management Company Limited to the extent of following:

Tariff Component	RLNG	HSD	Indexation
	Rs. /k	:W/h	Indexactor
ROE	0.5219	0.5956	Nil

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





- b) 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.
- c) The indices used in the quarterly indexation determined by NEPRA for the period October December 2024 shall prevail as reference for the first year's indexation.
- III. The insurance component shall be adjusted annually on the basis of actual cost subject to maximum insurance cap of 0.80% of the sum insured.
- IV. Hybrid Take & Pay arrangement for payment of ROE component on the basis of Net Electrical Output exceeding 35% of the total contract capacity in terms of kWh. Up to 35%, the existing mechanism shall prevail.
- V. The revised tariff components along with revised indexations shall be effective from January 01, 2025.

#### **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**

Engr. Rafique Ahmed Shaikh

Member

Amina Ahmed Member

Engr. Maqsood Anwar Khan

Member

Waseem Mukhtar Chairman

