



Registrar

# National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/R/ADG(TRF)/PAR-10/33015-33017  
July 30, 2021

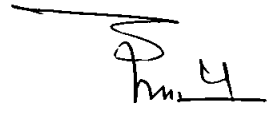
Subject: **Decision of the Authority in the matter of Tariff Proposal submitted by Central Power Purchasing Agency (Guarantee) Limited (CPPA-G) for Import of 969 MW from Neelum Jhelum Hydropower Project (Case No. NEPRA/PAR-10)**

Dear Sir,

Please find enclosed herewith the subject Decision of the Authority (06 pages) in Case No. NEPRA/PAR-10.

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.

Enclosure: As above

  
30 07 21  
( Syed Safeer Husasain )

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

CC:

1. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad.
2. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad.

**DECISION IN THE MATTER OF TARIFF PROPOSAL SUBMITTED BY CENTRAL POWER PURCHASING AGENCY GUARANTEE LIMITED (CPPA-G) FOR IMPORT OF 969 MW FROM NEELUM JHELUM HYDROPOWER PROJECT**

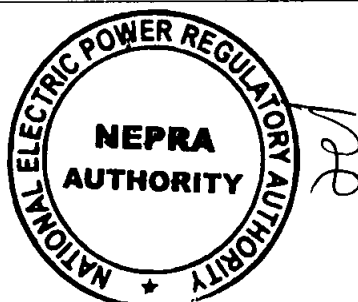
**1. Background/Introduction:**

1.1 In term of Regulation 3 of NEPRA (Import of Electric Power) Regulations, 2017 (herein referred to as **IEPR-2017**), Central Power Purchasing Agency (Guarantee) Limited (herein referred to as **CPPA-G** or the **Buyer** or the **Power Purchaser**) filed an application dated February 12, 2021 before NEPRA on February 12, 2021 seeking determination of generation tariff proposed by Neelum Jhelum Power Company Private Limited (herein referred to **NJHPC** or the **Seller**) for its hydropower Project for import of electric power from Azad Jammu & Kashmir (**AJK**). In the process, the Seller has requested approval of leveled tariff of PKR. 10.3026/kWh over the tariff control period of 30 years on BOO basis for its proposal from 969 MW Power Project (“**Project**”).

**2. Salient Feature of the Tariff Proposal:**

2.1 Salient features of the tariff proposal are as under:

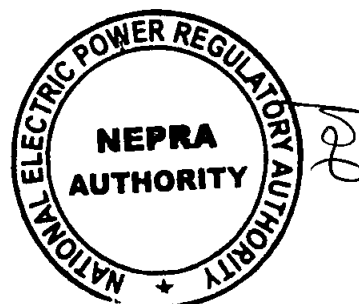
Project Company	Neelum Jhelum Hydropower Company		
Project Sponsor	Water & Power Development Authority (WAPDA)		
Project Location	District Muzaffarabad, Azad Jammu & Kashmir		
Power Purchaser	Central Power Purchasing Agency (Guarantee) Limited		
Construction Period (Years)	30		
Project Type	Run of River		
Project Basis	BOO		
Gross Capacity (MW)	969		
Auxiliary Consumption (MW)	4.46		
Net Capacity	964.54		
Annual Net Energy Production (GWh)	4630.00		
Plant Capacity Factor	54.8%		
Turbines (Vertical Francis)	Four Vertical Shaft Francis Turbine (242.25 MW)		
Construction Period (Years)	10.5		
	<b>Project Cost</b>	<b>PC-1 approved</b>	<b>Actual Cost</b>
	<b>Description</b>	<b>PKR in M</b>	
Project Cost	Main Contract Price & Variation Orders	197,283	156,083
	Contractor Claim	4,500	1,693
	Duties & Taxes	7,500	6,129
	Cost of Insurance & P.Gs	3,577	2,676
	Cost of Escalations/Indexations	73,252	68,158
	Exchange Loss	100,768	81,428



	Land Acquisition & Lease	2,000	1,500	
	Engineering & Supervision	20,321	20,321	
	Project Management Cost	5,955	5,330	
	CSR & Mitigation Measures	5,237	5,237	
	Physical Contingencies	4,957	4,957	
	<b>Total Base Cost</b>	<b>425,350</b>	<b>353,512</b>	
	Interest During Construction	81,458	74,784	
	<b>Total Project Cost</b>	<b>506,808</b>	<b>428,296</b>	
Project Financing	Debt (79.2%)-(74.1%)	401,391	317,367	
	Equity (9.3%)-(9.72%)	47,133	41,630	
	Neelum Jhelum Surcharge (11.5%)-(16.18%)	58,282	69,298	
	<b>Total Project Financing</b>	<b>506,808</b>	<b>428,296</b>	
Financing Terms	Description	Terms		
	Loan Term	28 Years with 8 years grace period		
	Debt Repayment	20 Years Equal Principal Repayment		
	<b>Loan</b>	<b>Mark-up</b>		
	Foreign Relent Loans	12% to 15% p.a		
	Cash Development Loan	10.65% to 11.79% p.a		
	National Bank Loan	6 M Kibor (7.04%) +113 bps		
Operation Phase Cost		<b>PKR in M</b>		
	<b>Description</b>	<b>Year 1-20</b>	<b>Year 21-30</b>	
	<b>Operation Cost</b>			
	O&M (per annum)	3,500	3,500	
	Water Use Charges	5,093	5,093	
	Insurance & ERP	1,600	1,600	
<b>Total</b>	<b>10,193</b>	<b>10,193</b>		
<b>Tariff (levelized)</b>	PKR 10.3026 /kWh			
<b>Exchange Rate</b>	1US\$ =PKR 165			

2.2 According to the Seller, the proposed Project cost and reference tariff is based on the following assumptions. A change in any of these assumptions will necessitate a corresponding adjustment in the Reference Tariff:

- i. The levelized tariff is applicable for the period of 30 years; the debt shall be serviced (repayment of principal and interest charges) in first 20 years;
- ii. Debt for the project consists of foreign relent loans and cash development loans by GoP and local commercial loans.
- iii. Debt to equity ratio of 74:26.
- iv. An exchange rate of PKR 165/USD has been assumed. Indexation against PKR/ USD variations shall be permitted for all the project costs denominated in the foreign currency. Tariff components



shall be respectively indexed for exchange rate variations as discussed under Indexations & Adjustments;

- v. The Power Purchaser will compensate for the energy delivered prior to before effective date of tariff determined vide case No. NEPRA/IPT-03/NJHPC-2018. Payments will be invoiced to the Power Purchaser as per the mechanism specified in the PPA; otherwise NEPRA may instruct to Power Purchaser for adjustment of such Export of Power against of Import of Power by the Power Seller.
- vi. The Power Purchaser will be solely responsible for the financing, engineering, procurement, construction, testing and commissioning of the interconnection and transmission facilities. The Facilities will be made available to the Project at least on or before the deadline set in the Power Purchase Agreement. Furthermore, the Power Purchaser will be solely responsible for the operation and maintenance of the interconnection and transmission facilities;
- vii. The Power Purchaser will bear hydrological risk;
- viii. The PPA will be structured as a take or pay contract whereby the Capacity Purchase Price will be payable to the Project company regardless of the actual dispatch levels;
- ix. Water Use Charge and its indexation will be charged at the same rate as provided for in the approval of ECC letter No. F.I/11/2019 dated 25.03.2019 and Tripartite Agreement signed between WAPDA, Government of Pakistan and the Government of AJK;
- x. Custom duties for import of plant, materials and spares and parts is assumed at 5% which will be adjusted as per actual payment at COD and no other import duties have been assumed;
- xi. Only 6% withholding tax on EPC onshore works has been assumed; withholding tax on O&M cost is not assumed; and no assumptions has been made for any other taxes including sales tax and value added taxes on the EPC contract (both onshore and offshore works) and for the O&M cost. In case there is any change in taxes etc. or additional taxes, fees, excise duty, levies etc. are imposed, the project cost and reference tariff shall be adjusted accordingly;
- xii. In case of any unintentional error or omissions, typographic errors, and any genuine assumption being overlooked, the same will be corrected/ incorporated and advised to the Power Purchaser as soon as NJHPC becomes aware of it;
- xiii. Cost of working capital has not been assumed;
- xiv. On the closing of the project costs after submission of final bill by the contractor, reference tariff will be adjusted to account for one – time adjustments to commensurate the depreciation component with final/closing costs of the project; and
- xv. Any additional indexation or concession allowed by the GOP, NTDC/CPPA-G/ NEPRA or any other government entity to any IPP will be allowed to NJHPC without any discrimination.

### 3. Proceedings:

- 3.1 Under Regulation 3(6) of IEPR-2017, the application of CPPA-G on behalf of NJHPC was admitted by the Authority on March 30, 2021. As per the Regulation 4(1) of IEPR-2017, upon admission of a tariff

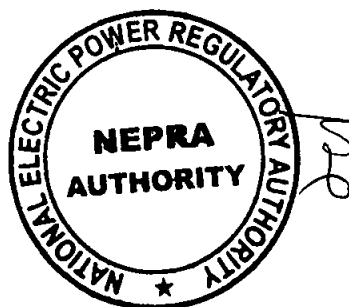


proposal, further proceeding were conducted as per the procedure provided in NEPRA Tariff (Standard and Procedure) Rules 1998 including but not limited to the publication of salient features of the application, seeking comments/intervention and conduct of hearing.

3.2 The Authority decided to conduct hearing into the matter on June 21, 2021. As per Regulation 4(1) of IEPR-2017 upon admission of the petition, the salient features of the tariff proposal and issues of hearing were advertised in the national newspaper on June 10, 2021 and uploaded on NEPRA website, seeking filing of replies, intervention request and comments of any interested or affected person. No comments/intervention request were filed.

3.3 On the basis of available record, following issues were framed to be considered during the hearing:

1. Whether the claimed plant Capacity factor of 54.8% and net annual Energy of 4630.00 GWh is justified?
2. Whether the claimed capacity of 969 MW has been arrived by conducting commissioning test as per the international testing protocols?
3. Whether the claimed construction period of almost 10.5 years (125 months) is justified?
4. Whether the contracts for Civil Work and Electro Mechanical & Hydraulics were awarded through fair and transparent bidding?
5. Whether the total Construction Cost of PKR. 316,167 million comprising of (a) Main Contract Price of Civil Works, Electro Mechanical & Hydraulics and their Variation Orders of PKR 166,581 million, (b) Cost Escalation of PKR 68,158 million and (c) Exchange Losses of PKR 81,428 million are justified?
6. Whether the claimed Non-Construction Cost of PKR. 32,388 million comprising of (a) Engineering Supervision Cost of PKR 20,321 million, (b) Land Acquisition & Lease Cost of PKR 1,500 million, (c) CSR & Mitigation Measures Cost of PKR 5,237 million and (d) Project Management Cost of PKR 5,330 million are justified?
7. Whether the claimed Physical Contingencies cost of PKR 4,957 million is justified considering the Project has already achieved COD in 2018?
8. Whether the claimed Interest During Construction cost of PKR 74,784 million is justified?
9. Whether 15% interest rate on foreign loan is justified?
10. Whether the Return on Equity (ROE) and Return on Equity during Construction (ROEDC) computed at 10% IRR net of Withholding Tax with dollar indexation is justified?
11. What is the total amount of Neelum Jhelum Surcharge collected from consumers and what is its contribution in project cost?
12. Whether the annual O&M cost of PKR. 3,500 million is justified?
13. Whether NEPRA O&M Guidelines have been kept in view for claiming O&M Cost?



14. Whether the claimed Insurance cost per annum of PKR 1,550 million for operation period is justified?
  15. Whether allowing Water Use Charge (WUC) to the Project is justified?
  16. Any other issues the Authority deems appropriate.
- 3.4 Hearing in the matter was held on June 21, 2020 wherein representative of the Seller, Punjab Power Development Board, Pakhtunkhwa Energy Development Organization (PEDO), WAPDA, CPPA-G (Buyer) were in attendance. During the hearing, the Authority observed that, a Third Party Validation (TPV) needs to be carried out for the Project, which has not been done even after 3 years of the decision/approval.
- 3.5 In response to above, NJHPC stated during the hearing that it has written several letters to relevant forums like Ministry of Water Resources (MoWR), Ministry of Planning Development and Reforms (MoPD&R) and Planning Commission to address the issue of TPV copies of which were also shared with NEPRA. The Seller has informed that according to Planning Commission the consultant to be hired for the conduct of TPV is at appointment stage.

#### 4. Finding of the Authority

- 4.1 The Authority has already held that opinion which is reflected in the Project's tariff decisions dated November 19, 2018 that as per the statutory mandate, the assessment of cost and resultant tariff is the exclusive domain of NEPRA. In the instant case, the Government of Pakistan through ECNEC has raised reservations on the Project by issuing conditional approval of the PC-1. Being a government owned project the Authority can't ignore such observations.
- 4.2 The Authority is of the opinion that the Seller has now two options either to get a waiver of the requirement of TPV by ECNEC/relevant agency or conduct the TPV and submit the same along with a tariff petition for the purpose of determination of tariff.
- 4.3 The Authority however is cognizant of the fact that TPV, which has not even started yet is a time consuming matter. Therefore, having considered the submissions of the Seller, comments of the Buyer and all the relevant documents, the Authority allows the Seller to charge the provisional tariff i.e Rs. 9.1184/kWh on take and pay basis (must run) till the conditions as mentioned in para 4.2 is fulfilled.

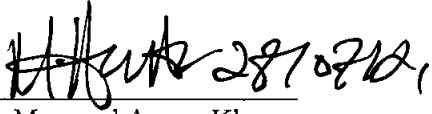
#### 5. **ORDER**

- 5.1 The Authority, in exercise of its powers under Regulation [4(3)] of the NEPRA (Import of Electric Power) Regulations, 2017, has decided to allow the Seller to continue to charge provisional tariff of Rs. 9.1184 per kWh on take and pay basis with must run condition which was made effective from October 17, 2019 (the date of notification of the Authority's Order dated August 19, 2019 and its further extension through Authority's Decision dated March 30, 2021). This rate shall be subject to adjustment in view of the aforementioned i.e the Seller either get a waiver of the requirement of TPV by ECNEC/relevant agency or conduct the TPV. Further, the Seller is directed to file a tariff petition through CPPA-G after complying with either of the two options.
- 5.2 In light of above, the petition is accordingly disposed of.



6. The decision is being intimated to the Federal Government for notification in the official Gazette as per Section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 read with regulation 4(4) of the NEPRA (Import of Electric Power) Regulations, 2017.

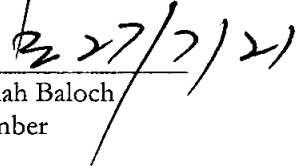
**AUTHORITY**



Engr. Maqsood Anwar Khan  
Member

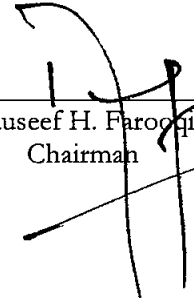


Rehmatullah Baloch  
Member



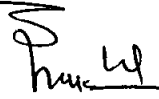


Rafique Ahmad Shaikh  
Vice Chairman



Tauseef H. Farooqi  
Chairman





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