

GOVERNMENT OF KHYBER PAKHTUNKHWA
PAKHTUNKHWA ENERGY DEVELOPMENT ORGANIZATION

18 MW PEHUR HYDROPOWER COMPLEX SWABI

Phone: 0938-270633, Fax: 0938-270195



For info & n. e p?

- Addl Dir. I (P.O.)

copy to:

- ADL (T)

LA (LIP)

cc:

- Chairman

- m (CAH)

- m (mge)

- m (Lies)

No. 935/PEDO/RE Pehur HPC

Dated, the 24.6.2021

To

The Registrar,
National Electric Power Regulatory Authority (NEPRA),
NEPRA Tower, Atatürk Avenue (East),
Sector G-5/1, Islamabad.

Subject: Petition for Tariff Modification – 18 MW Pehur Hydropower Project
Reference Decision No. NEPRA/TRF-150/SHYDO-2010/4295-4297 dated
6th December 2010

Dear Sir

I Junaid Iqbal, Resident Engineer Pehur Hydropower Complex, being duly authorized by Pakhtunkhwa Energy Development Organisation (PEDO) through letter No.4754/PEDO/CEO/NEPRA Dated 16.06.2021 hereby submit this Petition for Tariff Modification to National Electric Power Regulatory Authority (NEPRA).

I certify that documents in support attached with this Petition for Tariff Modification are prepared and submitted in conformity with the provisions of NEPRA (Tariff Standards and Procedures) Rules 1998 and undertake to abide by the terms and provisions of the above said rules. I further undertake that the information provided in the Petition for Tariff Modification and attached documents in support are true and correct to the best of my knowledge and belief.

This Petition for Tariff Modification is being submitted by PEDO for kind consideration and approval of the Authority, pursuant to section 31 of the Regulation of Generation, Transmission and Distribution of Electric Power Act 1997, read with Rule 3 of the NEPRA Laws for Petition for Tariff Modification on Authority's Decision No. NEPRA/TRF-150/SHYDO-2010/4295-4297 dated 6th December 2010.

The Petition for Tariff Modification (including its annexures) are submitted in triplicate together with:

The cross cheque No. 48232546 dated 24.06.2021 amounting to PKR 617,388 (Pakistani Rupees: Six Hundred Seventeen Thousand Three Hundred and Eighty Eight Only) in favor of NEPRA as application fee for the Petition for Tariff Modification; and

Along with clear copy of Rs. 617,388/-

REGISTRAR
Dy. No. 11284
Dated: 29/6/21

I hereby request the Authority for kind consideration and favourable, approval of our Petition for Tariff Modification by the Authority, in accordance, inter alia, with section 7(2)(g) and section 31 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997, read with Rule 16(6) of the NEPRA (Tariff Standards and Procedure) Rules, 1998 and Regulation 3(2) of NEPRA (Review Procedure) Regulations 2009, each as amended or modified from time to time.

In light of the submissions set put in Petition for Tariff Modification and the attached information, NEPRA is kindly requested to process the Petition for Tariff Modification at the earliest.

Respectfully submitted for an on behalf of PEDO.



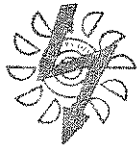
Junaid Iqbal
Resident Engineer
Pehur Hydropower Complex
Swabi

Copy for Information:

1. Chief Executive Officer PEDO Peshawar
2. Chief Engineer O&C PEDO Peshawar
3. Director O&C PEDO Peshawar



Junaid Iqbal
Resident Engineer
Pehur Hydropower Complex
Swabi



PEDO

PAKHTUNKHWA ENERGY DEVELOPMENT ORGANIZATION

Government of Khyber Pakhtunkhwa




No. 4754 / PEDO/CEO/NEPRA
Dated Peshawar the, 16/06/2021

AUTHORITY LETTER

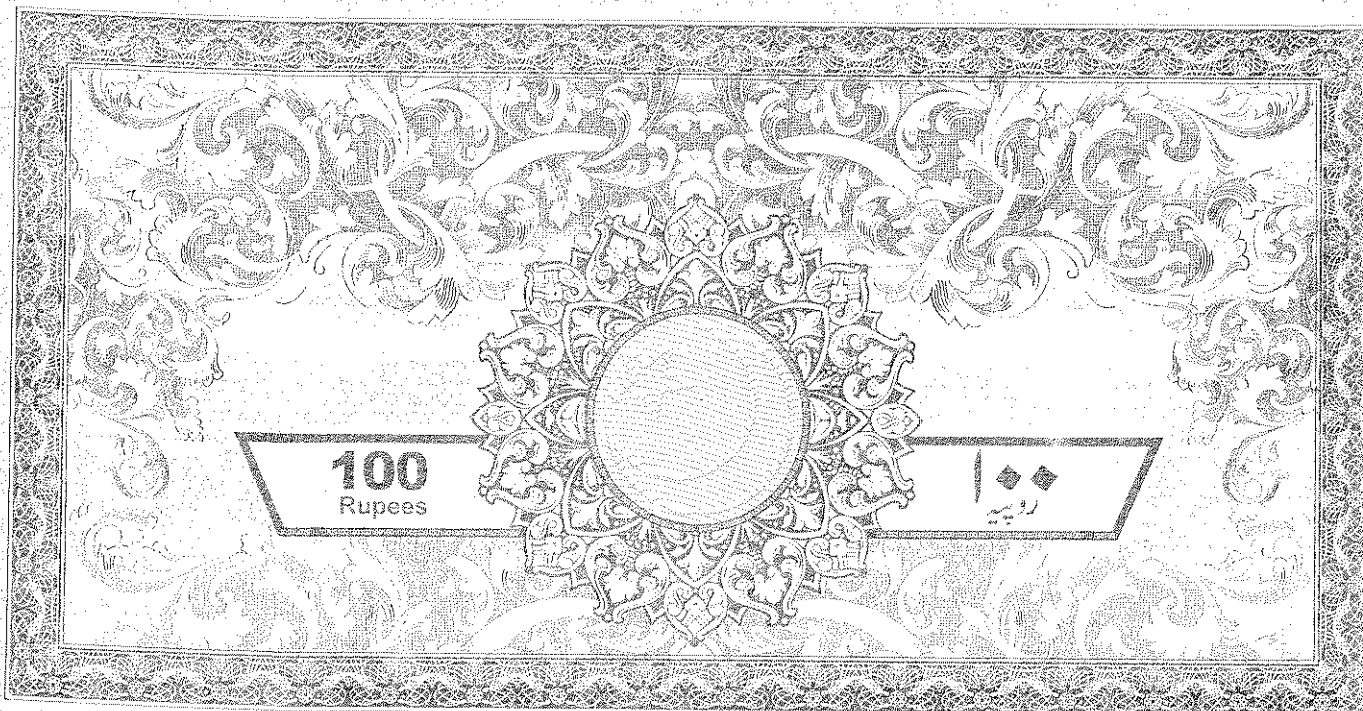
Subject: Petition for Tariff Modification – 18 MW Pehur Hydropower Project

Mr. Junaid Iqbal, Resident Engineer Pehur Hydropower Complex, Pakhtunkhwa Energy Development Organization (PEDO) is hereby authorized to represent PEDO for the purposes of filling an application for tariff modification under Section 31 of the Regulation & Generation, Transmission and Distribution of Electric Power Act 1997 read with Rule 16(6) of the NEPRA (Tariff Standards and Procedure) Rules, 1998 and Regulation 3(2) of the NEPRA (Review Procedure) Regulations, 2009, each as amended, restated or modified from time to time, for 18 MW Pehur HPP before NEPRA.

He is also authorized to attend any meeting(s) and discussion related to the Tariff Modification and to provide any information & documents in this regard.


(Muhammad Naeem Khan)
Chief Executive Officer
PEDO, Peshawar

Chief Executive Officer
PEDO



BEFORE

THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

PAKHTUNKWA ENERGY DEVELOPMENT ORGANIZATION, PESHAWAR, PROVINCE OF KHYBER PAKHTUNKHWA,
PAKISTAN

AFFIDAVIT

I, Junaid Iqbal, Resident Engineer Peshur HPP of Pakhtunkhwa Energy Development Organization, Plot # 38, Sect B-2, Phase 5 Hayatabad, Peshawar, Khyber Pakhtunkhwa, do hereby declare and affirm on oath as under:

1. That the accompanying Petition for Tariff Modification of 18 MW Peshur Hydropower Project has been filed before the National Electric Power Regulatory Authority and the contents of the same may kindly be read as an integral part of this affidavit.
2. That the contents of the accompanying Petition for Tariff Modification are true and correct to the best of my knowledge and belief and nothing has been concealed or mis-stated therein.

1111

PAKHTUNKHWA
DATED 20/05/2011
LICENSING
STAMP NUMBER
PESHAWAR

Before

National Electric Power Regulatory Authority

Petition for Tariff Modification

by

Pakhtunkhwa Energy Development Organization

for

Pehur Hydropower Project 18 MW

at

District Swabi, Khyber Pakhtunkhwa

24th June 2021

Pehur Hydropower Project

Pakhtunkhwa Energy Development Organization

Plot 38, Sector B-2, Phase-5 Hayatabad Peshawar.

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Annexure 6: Insurance Policy of NICL

Annexure 7: Record of Insurance Payments

Annexure 8: Energy Wheeling Agreement with PESCO

01 Petitioner's Information

1.1. Name and Address

Pakhtunkhwa Energy Development Organization
Plot 38, Sector B-2, Phase-5 Hayatabad Peshawar

Tel: + 92-91-9217422

Fax: + 92-91-9217331

Website: www.pedo.pk

Email: info@pedo.pk

1.2. Authorized Representative

Mr. Junaïd Iqbal
Resident Engineer Pehur Hydropower Complex
Pakhtunkhwa Energy Development Organization

02 Grounds of Petition for Tariff Modification

2.1. Summary and Background

- 2.1.1. Pehur Hydropower Project (herein referred to as the "Project") is an independent component of the Pehur High Level Canal (PHLC) Project of Pakhtunkhwa Energy Development Organization (herein referred to as "PEDO", or the "Petitioner") and is located on the right bank of Indus River, immediately downstream of Tarbela reservoir. The Project lies in Swabi District of Khyber Pakhtunkhwa (KP) Province, approximately 1 Km south of Gadoon Industrial Estate and at a distance of about 5 Km from Topi village in the north. The Project is located downstream of the Gandaf Pressure Tunnel (GPT), which is an integral part of PHLC, which off-takes from Tarbela reservoir at an elevation of 393.20 m above sea level.
- 2.1.2. The Project is one of the many such initiatives by the Government of Khyber Pakhtunkhwa (GoKP) to utilize the hydropower potential of the province. The Feasibility Study of the Project was completed in May 2001 and after requisite governmental approvals including allocation of funds and EPC contracting process, the construction of the Project started in February 2004. The Project has been connected to 132 KV Gadoon Grid Station being operated through a 1.2 Km long, single circuit 132 kV transmission line.
- 2.1.3. Authority granted Generation License No. GL(Hydel)/08/2009 to the Project on 26th November 2009. PEDO filed tariff petition for the Project to the Authority on 11th January 2010 for determination of final generation tariff at COD. The Project achieved its Commercial Operations Date (COD) on 1st March 2010. PEDO agreed with PESCO (Minutes of Meeting attached as Annexure 1) for supply of electricity at pre-COD rate of 1 Rs/kWh till COD. The Authority determined the tariff of the Project through its Order No. NEPRA/TRF-150/SHYDO-2010/4295-4297 dated 6th December 2010. (the "Order" or "Tariff Determination").
- 2.1.4. After the Tariff Determination, PEDO coordinated several times with PESCO and CPPAG for signing of EPA, but both were reluctant to sign the EPA for the Project with PEDO. Later in 2019, upon the suo moto action of Supreme Court of Pakistan and after nine years of award of COD tariff, CPPAG agreed to negotiate and sign EPA for the Project, and accordingly an EPA was signed between PEDO and CPPAG on 14th May 2019 (Annexure 2).
- 2.1.5. It is important to highlight here that in 2019, at the time of signing of PPA/EPA with CPPAG, PEDO had decided that electricity generated during the remaining useful life of the Project shall be sold to industrial consumers through wheeling. Accordingly, the EPA that was to be executed with CPPAG had to include an 'exit clause' that allowed PEDO to exit from the EPA with CPPAG and execute an EPA with industrial consumers for sale of electricity through wheeling, after approval from NEPRA (which was taken by PEDO through amendments in Generation License of Project on April 27, 2020).
- 2.1.6. Keeping in view the above objective of sale of electricity to industrial consumers, CPPAG and PEDO were restrained by the fact that the NEPRA approved tariff was on two-step basis i.e. higher tariff rate during first 10 years for debt repayment. Accordingly, parties had to come up with a formula that does not restrict (a) wheeling or 'exit' from the EPA with CPPAG, and (b) allows realization of overdues from CPPAG/PESCO.
- 2.1.7. Accordingly, CPPAG and PEDO agreed on below provided formula (provided in clause 'a' of EPA appended as Annexure 2) for payments from Project's COD and onwards, and is subject to Authority's Approval:

“the Parties agree that For avoidance of doubt, it is clarified that the amount of delivered electrical output in kWh by the Seller since Commercial Operation Date to Effective Date will be paid by PESCO upon reconciliation through separate arrangement based on levelized tariff and indexed from time to time by NEPRA after deduction of already paid amount.”

- 2.1.8. We understand that CPPAG, through its letter dated 13th March 2020, requested NEPRA to approve the EPA of the Project, and was subsequently advised by Authority (letter No. NEPRA/SA(Tech)/LAG-30/18807-08 dated 23rd July 2020 - Annexure 3) that the tariff determination of the Project is on “take or pay” basis instead of “take and pay” basis and is still valid. Moreover, Authority advised that since EPA of the Project is signed on “take and pay” basis, PEDO may file a tariff modification petition to NEPRA to modify the tariff to “take and pay” basis. In this regard it is highlighted as per existing Tariff Determination, payments against all tariff components by CPPA-G is to be made based on units supply i.e. there is no capacity payment, however there was a tariff step-down after 10th year that is proposed to be adjusted under this petition to align with the signed EPA.
- 2.1.9. Accordingly based on above, this Modification Petition is being instituted under Section 31 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997, read with Rule 3 of the NEPRA (Tariff Standards and Procedure) Rules, 1998 and all applicable provisions of other NEPRA laws for the modification Petition on the Authority’s Tariff Determination dated 6th December 2010.

2.2. Basis for Petition for Tariff Modification

- 2.2.1. This Tariff Modification is being filed to request the Authority to allow certain justified items and amendments in the tariff structure of the Project, due to reasons discussed in para 2.1.5., 2.1.6 and 2.1.9 above. This Tariff Modification provides justification of requirement of these items for the Project. PEDO requests the Authority to re-consider its decision and modify the tariff of the Project on the basis of matters summarized below:
- Tariff on Take and Pay Basis instead of Take or Pay Basis
 - Debt Term of 25 years instead of 10 years
 - Insurance during operations
- 2.2.2. Above tariff modification items have been discussed in detail in the next section.

03 Issues for Tariff Modification

3.1. Tariff on Take and Pay Basis instead of Take or Pay Basis

- 3.1.1 Authority in its Order part determined the tariff of the Project on “take or pay” basis, whereby hydrological risk is to be borne by Central Power Purchasing Agency (CPPA-G). Moreover, since EPA of the Project is signed on “take and pay” basis, PEDO may file a tariff modification petition to NEPRA to modify the tariff to “take and pay” basis. Moreover, Note. (ii) of the Order part of Tariff Determination states that:

“Payment on account of hydrological risk shall be made by the Power Purchaser on the basis of benchmark energy production based on the average historical hydrology for that particular month”.

- 3.1.2 However, para 17.2 of the Tariff Determination states that:

“The issue of hydrological risk and hydrology should be agreed between power producer and power purchaser with mutual consent and needs to be settled in PPA”.

- 3.1.3 Considering the above, PEDO in its EPA with CPPAG agreed the tariff on “take and pay” basis with CPPAG, whereby hydrological risk shall be borne by power producer. EPA was signed with CPPA-G on “take and pay” basis, because of the fact that PEDO intended to incorporate an “entry/exit clause” in the EPA, so that it can enter into a wheeling arrangement.

- 3.1.4 Later, CPPAG through its letter dated 13th March 2020 requested NEPRA to approve the EPA of the Project. However, Authority through its letter No. NEPRA/SA(Tech)/LAG-30/18807-08 dated 23rd July 2020 (Annexure 3) responded that”

“Tariff granted to the Projects are on ‘take or pay’ basis instead of ‘take and pay’ basis, which is still valid and operative as the same have not been amended or revised by the Authority. However, if PEDO or CPPA-G require any amendment in tariff determination of subject project, they may file a tariff modification petition in prescribed manner.”

- 3.1.5 Authority is kindly requested that since EPA of the Project is signed on “take and pay” basis therefore Tariff of the Project be modified from “take or pay” basis to “take and basis”, whereby hydrological risk to be transferred to power producer.

- 3.1.6 Authority is requested that allowing tariff on “take and pay” basis will reduce the overall burden of capacity payment on CPPA-G and the consumers. NEPRA State of Industry Report also states that:

“the obligation of capacity payments has increased due to the ‘Take or Pay’ Power Purchase Agreements (PPAs). Such types of PPAs require optimum utilization of available generation capacity to avoid the undue financial burden that emanates from capacity payments.”

The under-utilization of ‘take or pay’ power plants increased capacity burden on CPPA-G and the consumers. Moreover, “take or pay” EPAs also resulted in accumulation of circular debt, which is a serious issue confronting the power sector and the country as a whole. Capacity payments of CPPA-G also results in increased cost of electricity to end-consumers as well as result in piling of ever-increasing circular debt of the country.

- 3.1.7 Authority in case of similar hydropower projects also allowed tariff of “take and pay basis”, whereby hydrological risk is to be borne by the Power Producer.
- 3.1.8 Keeping in view the above, Authority is kindly requested to modify the tariff on take and pay basis. This will in turn reduce the capacity burden on CPPAG.

3.2 Debt Term of 25 Years instead of 10 Years

- 3.2.1 Authority in the Tariff Determination of the Project, allowed tariff on 10 years debt term to the Project, whereby higher tariff is allowed in initial 10 years and a lower tariff in last 15 years, which is requested to be adjusted to arrive at same tariff over the tariff control period for following reasons:
- The existing tariff determined by the Authority is higher for the first 10 years and electricity for such period has already been sold. Keeping this in view CPPA allowed an exit from EPA, in the best interest of consumers. Accordingly, the tariff structure is requested to be revised from COD of the project, by increasing the debt period.
 - The Petitioner has already served ‘exit notice’ as per clause (l) of its EPA with CPPA (Annexure 4) for entering in wheeling arrangements with BPCs as per Authority’s approval dated 27th April 2020.
 - Approval of revised tariff structure by Authority will resolve the matter of unpaid receivables of last 10 years from CPPAG/PESCO.
- 3.2.2 For above reasons, Authority is kindly requested to allow a debt term of 25 years. If the debt term is changed to 25 years, the benchmark applicable annual tariff for first 10 years will reduced to 4.8159 Rs/kWh to 4.3143 Rs/kWh, as provided hereunder:

Tariff table as allowed in the Tariff Determination (10 years debt period)

Tariff Components	Year 1-10 (Rs/kWh)	Year 11-25 (Rs/kWh)
Fixed Charge:		
- Fixed O&M Local	0.6783	0.6783
- Debt Service	2.4699	-
- Return on Equity	1.0445	1.0445
- ROEDC	0.2418	0.2418
- Withholding Tax	0.0965	0.0965
Variable Charge:		
- Variable O&M: Foreign	0.0675	0.0675
- Variable O&M: Local	0.0675	0.0675
- Water Use Charge	0.1500	0.1500
Total	4.8159	2.3461

Tariff table as requested in this Tariff Modification (25 years debt period)

Tariff Components	Year 1-10 (Rs/kWh)	Year 11-25 (Rs/kWh)
Fixed Charge:		

- Fixed O&M Local	0.6783	0.6783
- Debt Service	1.9682	1.9682
- Return on Equity	1.0445	1.0445
- ROEDC	0.2418	0.2418
- Withholding Tax	0.0965	0.0965
Variable Charge:		
- Variable O&M: Foreign	0.0675	0.0675
- Variable O&M: Local	0.0675	0.0675
- Water Use Charge	0.1500	0.1500
Total	4.3143	4.3143

- 3.2.3 Accordingly, if the requested modification is allowed, the calculation of receivables (of past ten years) from CPPAG/PESCO under two scenarios are provided below. The two scenarios provided hereunder are (A) if tariff is not modified by NEPRA and (B) if this tariff modification request is approved by NEPRA. The calculations for both scenarios are based on actual electricity supplied from the Project i.e. 391.55 GWh as agreed by PESCO (letter attached as Annexure 5) from COD to signing of EPA.

A- Last 10 year cumulative receivable, if tariff is not changed by NEPRA (i.e. as per original Tariff Determination)			
	Reference	Indexed	
Price of electricity supplied from COD to Singing of EPA (Mar 2010 to 14 th May 2019 = 391.55 GWh)	1,886	2,512	
Payment received from PESCO (for the period from Mar 2010 to Nov 2017)	303	303	
Amount receivable from CPPAG/PESCO	1,583	2,209	

B- Last 10 year cumulative receivable, If tariff is changed by NEPRA, as per this petition			
	Reference	Indexed	
Price of electricity supplied from COD to Singing of EPA (Mar 2010 to 14 th May 2019 = 391.55 GWh)	1,716	2,339	
Payment received from PESCO (for the period from Mar 2010 to Nov 2017)	303	303	
Amount receivable from CPPAG/PESCO	1,413	2,036	

- 3.2.4 Moreover, Authority in case of a similar hydropower project also allowed the tariff on of 25-year debt term.
- 3.2.5 Accordingly, for a consistent tariff throughout the tariff control period, Authority is kindly requested to allow a debt period of 25 year to the Project.

3.3 Insurance during operations

- 3.3.1 Petitioner in its earlier tariff petition requested the Authority to allow insurance during operations of the Project. However, since no documentary evidence (insurance policy) was provided along with the tariff insurance petition, therefore Authority decided to allow the insurance component once SHYDO/PEDO finalizes its insurance arrangements and submits documentary evidence in this regard and accordingly allowed insurance during operations to be considered for a later decision up to a maximum of 1.35% of the EPC cost.
- 3.3.2 The relevant para 18.2 of the Tariff Determination is reproduced hereunder:
- "In the absence of any documentary evidence, the Authority has decided not to allow insurance cost at this point of time. However, the Authority considered that the insurance components will be considered as and when SHYDO finalizes its insurance arrangements and submits the documents to the Authority for consideration and decision thereon up to a maximum of 1.35% of EPC cost."*
- 3.3.3 PEDO has obtained All Risk Insurance policy for the Project from National Insurance Company Limited (NICTL). Insurance policy covers the risk of Physical Loss or Damage including Machinery Breakdown. As per NICTL Policy No. 2021/IB/B/EA/R/D/P0001 and payment record

(Annexure 6) Petitioner is required to pay annual insurance to NICL during the operational phase of the Project, which is requested to be allowed to the Project.

3.3.4 Moreover, Authority in case of similar hydropower projects also allowed insurance during operations.

3.3.5 Detail of year wise summary of insurance payments to NICL are summarized below:

Year	Cheque No	Date	Amount (PKR)
2011-12	7826594	11-04-2012	5,641,528
2012-13	19043355	15/05/2013	5,641,528
2014-15	49615865	23/10/2014	2,750,150
2015-16	73586547	04-01-2016	4,233,784
2016-17	89984689	19-01-2017	3,810,406
2017-18	2367696	01-01-2018	3,810,406
2018-19	12858969	10-01-2019	3,810,406
2019-20	29909820	15-01-2020	5,117,496
2020-21	40856689	11-01-2021	5,117,496
Total			39,933,200

Record of the above insurance payments is attached as Annexure 7.

3.3.6 In view of the earlier decision in the Tariff Determination, Authority is kindly requested to allow cost of Insurance during operations to the Project.

04 Prayer

In light of the foregoing, it is respectfully prayed that the Order/Tariff Determination may be modified in a manner that the tariff adjustments are made in terms of this Petition for Tariff Modification.

Authority is requested to kindly to direct CPPAG/PESCO for an earliest payment of PEDO's receivables in respect of energy supplied from COD to the signing of EPA. Any other relief that the Petitioner may be entitled to, be also allowed to the Project in the interest of justice.

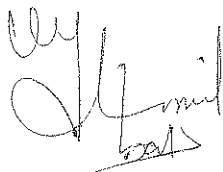
Moreover, Authority in its modification of generation license (No. NERPA/R/LAG-145/11367-72 dated 27th April 2020) of Pehur Hydropower Project approved wheeling arrangement, which includes Energy Wheeling Agreement (EWA) for supply of electricity to specified industrial consumers. Under the EWA (attached as Annexure 8), excess energy (if any) will be supplied to PESCO at NEPRA approved tariff. This is also in line with NEPRA's Amendment to Wheeling Regulations dated 12th December 2020. Clause 7.1 (a) of approved EWA states that:

"The parties agree that the time period for delivery of excess energy, if any, at the Exit point at the end of Billing Cycle shall be purchased by PESCO at levelized tariff determined by NEPRA and indexed by NEPRA from time to time."

Authority is kindly required to approve that the tariff allowed for the above Tariff Modification Petition may also be made applicable for sale excess energy to PESCO under EWA dated 17th February 2020.

The Petitioner also requests that it be provided with an opportunity to present full supporting evidence and documents at a time directed by the Authority. The Petitioner reserves the right to take additional grounds as may be required.

Respectfully submitted on the behalf of Petitioner.



Resident Engineer
O&M Pehur HPC
PEDO Swabi

Mr. Junaid Iqbal
Resident Engineer Pehur Hydropower Complex
Pakhtunkhwa Energy Development Organization
24.06.2021