



P E D O

PAKHTUNKHWA ENERGY DEVELOPMENT ORGANIZATION
Government of Khyber Pakhtunkhwa



No. 112/PEDO/RE/Ranolia HPC
Dated the Peshawar, 04/02/2022

For info & n.c.p.
[Signature]

To

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

- Adde DI-I
copy to
- ADG CT)
- SA (Tech)
- SA (WGE)
- LA (MID)
- M.F

cc:
Chairman
- V.C/W (WGE)
- m (CAIT)
- m (lies)

Subject: PETITION FOR TARIFF MODIFICATION – 17 MW RANOLIA HYDROPOWER PROJECT

Reference Decision No. NEPRA/TRF-231/PHYDO-2013/4264-4266 April 29, 2014

Dear Sir

I Said Nabi, Project Manager, being duly authorized by Pakhtunkhwa Energy Development Organisation (PEDO) through letter No. 25/PEDO/CEO/NEPRA dated January 07, 2022 herby 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-231/PHYDO-2013/4264-4266, dated April 29, 2014.

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

- a) Bank Draft No. ABC.BBB14102159 of Allied Bank, ABL Tower Hayatabad, Peshawar amounting to PKR 669,564 (Pakistani Rupees six hundred sixty nine thousand, five hundred sixty four only) in favour of NEPRA as application fee for the Petition for Tariff Modification; and
- b) Authority letter of PEDO

Cheque of Rs. 669,564/-

1369
9.2.2022

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.



Engr. Said Nabi

Project Manager

Ranolia Hydropower Project
Pakhtunkhwa Energy
Development Organization



P E D O

PAKHTUNKHWA ENERGY DEVELOPMENT ORGANIZATION
Government of Khyber Pakhtunkhwa Peshawar
Energy & Power Department




No. 251 PEDO/CEO/NEPRA
Dated the Peshawar. 07/01/2022


AUTHORITY LETTER

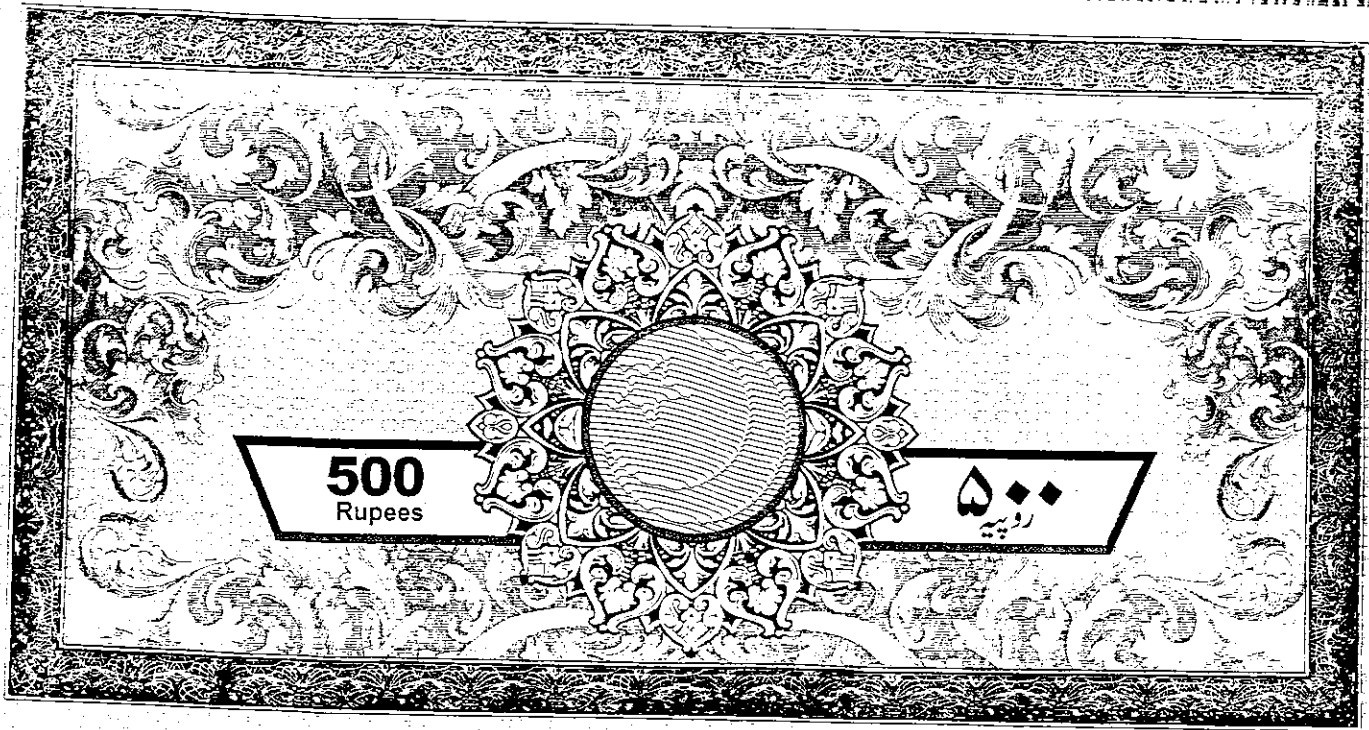
Subject: 17 MW RANOLIA HYDROPOWER PROJECT - TARIFF MODIFICATION PETITION BEFORE NEPRA

Engr. Said Nabi, Project Manager 17 MW Ranolia Hydropower Project, is hereby authorized representative of Pakhtunkhwa Energy Origination (PEDO) for the purposes of filling an application for tariff modification under 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 the NEPRA (Review Procedure) Regulations, 2009, each as amended, restated or modified from time to time, for 17 MW Ranolia 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


**CHIEF EXECUTIVE OFFICER,
PAKHTUNKHWA ENERGY DEVELOPMENT ORGANIZATION,
ENERGY & POWER DEPARTMENT,
GOVERNMENT OF KHYBER PAKHTUNKHWA**





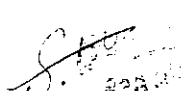
BEFORE
THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

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

AFFIDAVIT


I, Engr. Said Nabi, Project Manager Ranolia HPP of Pakhtunkhwa Energy Development Organization, Plot # 38, Sect B-2, Phase 5 Hayarabad, Peshawar, Khyber Pakhtunkhwa, do hereby declare and affirm on oath as under:

1. That the accompanying Petition for Tariff Modification of 17 MW Ranolia 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.


SAID NABI
PROJECT MANAGER
RANOLIA HPP (REDSIP)
PESHAWAR
Deponent

Verification

Verified on oath at Peshawar on this January 06, 2022 that the contents of the above affidavit are true and correct to the best of my knowledge and belief.


Deponent

Before

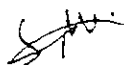
National Electric Power Regulatory Authority

Petition for Tariff Modification

by
Pakhtunkhwa Energy Development Organization
for
Ranolia Hydropower Project 17 MW
at
District Kohistan, Khyber Pakhtunkhwa Province

4th February 2022

Ranolia Hydropower Project
Pakhtunkhwa Energy Development Organization
Plot 38, Sector B-2, Phase-5 Hayatabad Peshawar.



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SPK

01 Petitioner's Information

1.1 Name and Address

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

Tel: +92-91-9217004

Fax: +92-91-9217331

Website: www.pedo.pk

Email: info@pedo.pk

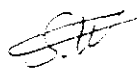
1.2 Authorized Representative

Engr. Said Nabi

Project Manager

Ranolia Hydropower Project

Pakhtunkhwa Energy Development Organization



02 Grounds for Tariff Modification

2.1 Summary and Background

Ranolia Hydropower Project (herein referred to as the "Project") is a high head run of the river hydropower project of Pakhtunkhwa Energy Development Organization (herein referred to as "PEDO", or the "Petitioner"). The Project is located along Ranolia Khwar, a tributary of Duber Khwar in the southwest of district Kohistan, in Khyber Pakhtunkhwa Province.

PEDO filed application for generation license of the Project with NEPRA on 20th February 2013, on which NEPRA granted generation license to the Project on 27th November 2013. PEDO filed tariff petition to the Authority for determination of EPC Stage generation tariff of the Project on 2nd April 2013. Authority conducted a hearing for the Project in August 2013 and later determined EPC stage tariff of the Project at 4.2520 cents/kWh via its decision No. NEPRA/TRF-231/PHYDO-2013/4264-4266, dated 29th April 2014 (the "Order" or "Tariff Determination"). The Project achieved Commercial Operations Date (COD) on 12th September 2021.

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 29th April 2014.

2.2 Basis for Motion for Tariff Modification

This Tariff Modification Petition is being filed to request the Authority to allow certain justified items to the Project. This Tariff Modification Petition provides justification for the necessity of these items for the Project. PEDO therefore, requests the Authority to re-consider its decision and modify the tariff on the matters summarized below:

- Tariff on Take and Pay tariff basis of Take or Pay
- Debt Term of 30 years instead of 20 years; and
- Pre COD Sale of Energy.

These items for Tariff Modification have been discussed in detail in next section

03 Issues for Tariff Modification

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

Authority determined the tariff of the Project on “take or pay” basis, whereby hydrological risk is to be borne by Power Purchaser. However, PEDO has entered into Energy Purchase Agreement (EPA) with Central Power Purchasing Agency Guarantee (CPPA-G) on “take and pay” basis (Annexure 1).

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 2) 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.”

PEDO therefore requests the Authority to modify the tariff of the Project from “take or pay basis” to “take and pay basis.

It is also pertinent to mention that allowing tariff on “take and pay” basis will reduce the overall burden of capacity payment on consumers. NEPRA State of Industry Report also states that CPPA-G’s obligation of capacity payments increased due to the ‘take or pay’ EPAs. Such types of EPAs 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 have increased capacity burden on 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.

Authority in case of similar hydropower project also allowed tariff of “take and pay basis”, whereby hydrological risk is to be borne by the Power Producer.

Keeping in view the above, Authority is kindly requested to modify the tariff on take and pay basis.

3.2 Debt Term of 30 Years instead of 20 years

Authority in the Tariff Determination, allowed tariff on 20 years debt term, whereby higher tariff is allowed in initial 20 years and a lower tariff in last 10 years. Since, PEDO is considering to take this Project for wheeling, whereby electricity of the Project shall be sold to industrial consumers of KP, Authority is therefore requested to adjusted the tariff of the Project on 30-year debt term instead of 20 years in order to arrive at same tariff over the tariff control period.

In case debt term of tariff is changed from 20 year to 30 years, the levelized tariff drops from 4.1245 Rs/kWh to 3.8077 Rs/kWh. The same is depicted in the tables below:

Tariff table as allowed in the Tariff Determination (20 years debt period):

Tariff Components	Year 1-20 (Rs/kWh)	Year 21-30 (Rs/kWh)
Fixed Charge:		
- Fixed O&M Local	0.4186	0.4186
- Fixed O&M Foreign	0.1047	0.1047
- Insurance	0.4271	0.4271
- Debt Service	1.5793	-
- Return on Equity	1.2021	1.2021
- ROEDC	0.2615	0.2615
- Withholding Tax	0.1098	0.1098
Variable Charge:		
- Variable O&M Local	0.0872	0.0872
- Variable O&M Foreign	0.0872	0.0872
Total Tariff	4.2775	2.6981
Levelized Tariff	4.1245	

Tariff table as requested in this Tariff Modification (30 years debt period):

Tariff Components	Year 1-20 (Rs/kWh)	Year 21-30 (Rs/kWh)
Fixed Charge:		
- Fixed O&M Local	0.4186	0.4186
- Fixed O&M Foreign	0.1047	0.1047
- Insurance	0.4271	0.4271
- Debt Service	1.1095	1.1095
- Return on Equity	1.2021	1.2021
- ROEDC	0.2615	0.2615
- Withholding Tax	0.1098	0.1098
Variable Charge:		
- Variable O&M Local	0.0872	0.0872
- Variable O&M Foreign	0.0872	0.0872
Total Tariff	3.8077	3.8077
Levelized Tariff	3.8077	

Moreover, Authority in case of a similar hydropower projects also allowed the tariff over the term of total concession period.

Accordingly, for a consistent tariff throughout the tariff control period, Authority is kindly requested to allow a debt period of 30 year to the Project.

3.3 Pre-COD Sale of Electricity

The Project is operational since November 2019 and is providing electricity to the national grid. However, due to outbreak of COVID-19, Chinese engineers/experts could not visit Pakistan for commission testing of Current Transformers (CT's), as a result of which COD testing could not be performed. After COVID-19 restrictions were eased, commissioning testing of CTs was performed at site in presence of NTDC, NEPRA and independent engineers. The COD testing was successfully completed on 11th September 2021 and COD of the Project has been declared on 12th September 2021.

Authority is requested that Project has injected a total of 61,706,720 kWh to the national grid till COD. Table below provides monthly breakdown of Pre-COD supply of electricity from the Project.

Months/Years	2019	2020	2021
	kWh		
January	-	-	957,350
February	-	787,550	1,654,390
March	-	5,052,830	1,700,600
April	-	1,519,680	4,191,820
May	-	2,160,510	8,460,870
June	-	2,157,120	8,803,920
July	-	2,268,600	8,761,930
August	-	1,228,080	4,693,430
September	-	1,893,460	1,860,900
October	-	1,919,410	-
November	14,510	524,600	-
December	8,310	1,091,750	-
Total	22,820	20,599,590	41,084,310

Since no provision about pre-COD sale of electricity have been captured in EPC stage tariff determination of the Project, therefore, the Project cannot realize any revenue occurring out of Pre-COD supply of electricity.

Authority in case of upfront tariffs for hydel, wind and bagasse power projects allowed Pre-COD sale of energy at the applicable tariff excluding principal repayment of debt component and interest component. Moreover, Pre-COD sale of energy is allowed to similar hydropower projects under cost plus regime. Furthermore, Authority has, in earlier comparable determinations, also allowed sale of electricity prior to COD pursuant to bilateral agreement on mutually agreed terms between the buyer and the seller. Moreover, Authority in case of similar hydropower project also allowed Pre-COD sale of energy.

Giving below are the precedents of allowance of Pre-COD sale of energy by NEPRA:

- a) In para 26 of NERPA's determination in the matter of Upfront Tariff for Small Hydro Power Generation Projects up to 25 MW Installed Capacity, Ref# NEPRA/UTH-01/4744-4746 dated 2nd April, 2015, the Authority allowed Pre-COD sale of Electricity. The relevant extract of para 26 is reproduced below;

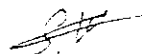
"The Authority, in comparable upfront tariffs has allowed pre-COD sale of electricity to the power producers. Accordingly, the Authority has decided to allow pre COD sale of electricity to the power producers in this upfront tariff, subject to the terms and conditions of PPA, at the applicable tariff excluding principal repayment of debt component and interest component. However, Pre-COD sale will not alter the required commercial operations date stipulated by the PPA in any manner."

- b) In para 6 NERPA's decision on the motion for leave for review filed by PPDCL for its 2.82 MW Pak-Pattan Hydropower Project, Ref # NEPRA/TRF-259/PPDCL-2014/1930-1932 dated 8th

February, 2016, the Authority allowed Pre-COD sale of electricity. The relevant extract of Para 6 is reproduced below for the Authority's kind consideration;

"..... the Authority has noted that the construction of inter-connection and related works is the responsibility of the power purchaser, i.e., CPPA-G/ DISCO, and the power dispersal facility should be ready before COD of the project; otherwise, penalty, if any, may be imposed on the power purchaser as per the standard terms of PPA/EPA. Further, the Authority hereby directs that the initial expenditure incurred by the power producer, if any, in this regard may be reimbursed by the power purchaser as per the terms agreeable to the power producer Moreover, Pre-COD sale of electricity is hereby allowed at the applicable tariff minus the repayment of debt and interest component, as allowed in the Upfront Tariff determinations of the Authority."

Authority is therefore requested to allow claim of compensation from the power purchaser i.e. CPPA-G for all electricity supplied into the grid system prior to achievement of COD at **the tariff rate applicable for the first year of operations minus the debt servicing component of tariff.**




04 Prayer

In light of the foregoing, it is respectfully prayed that the Order/Tariff Determination may be reviewed and modified to permit pre COD sale of energy and to a tariff on 'Take and Pay' basis.

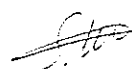
The Petitioner requests that it be provided with an opportunity to present full supporting evidence and documents at a time directed by the Authority. The Petitioner reserves the right to take additional grounds as may be required.

Authority is requested to allow any other relief that the Petitioner may be entitled to be allowed in the interest of justice.

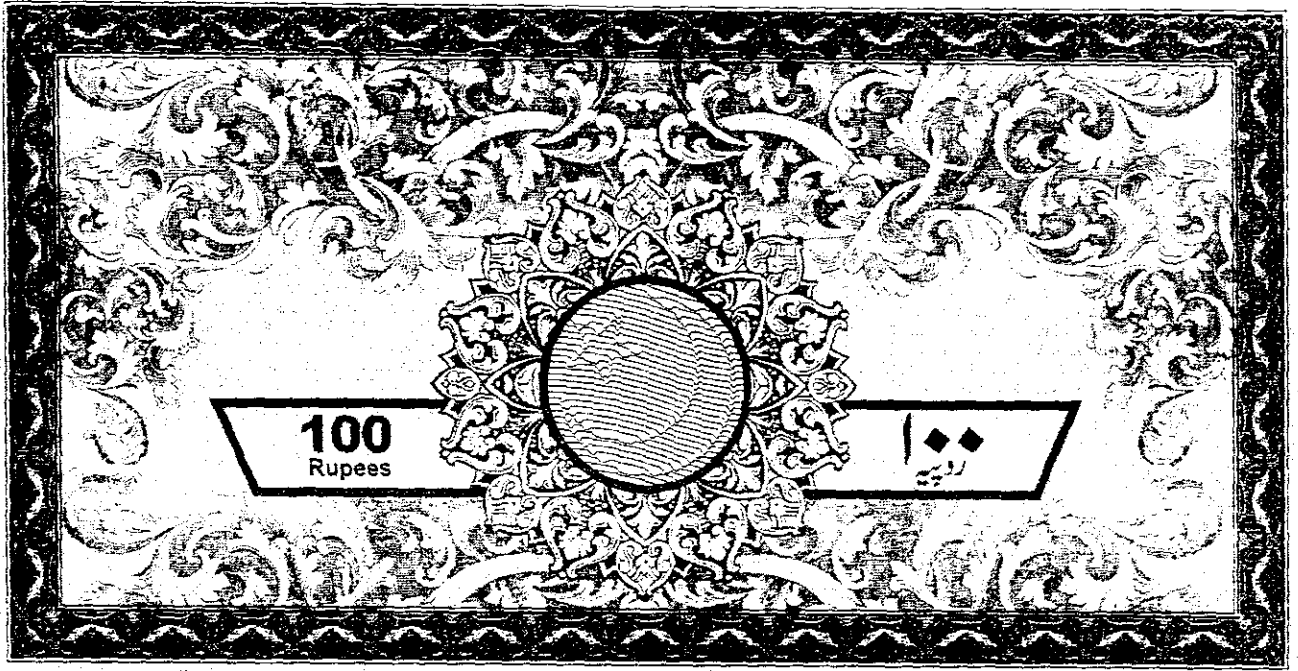
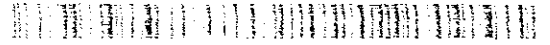
Respectfully submitted on the behalf of Petitioner.


PROJECT MANAGER
Ranolia HFP (REDSIP)
PEDO, Peshawar

Engr. Said Nabi
Project Manager
Ranolia Hydropower Project
Pakhtunkhwa Energy Development Organization



Annexure 1:
EPA with CPPA-G



ENERGY PURCHASE AGREEMENT

BY AND BETWEEN

CENTRAL POWER PURCHASING AGENCY (GUARANTEE) LIMITED

AND

PAKHTUNKHWA ENERGY DEVELOPMENT ORGANIZATION

RELATING TO

17 MW (GROSS) RANOLIA HYDROPOWER STATION

AT

RANOLIA KHWAR, TRIBUTARY OF DUBER KHWAR, DISTRICT KOHISTAN KHYBER, PAKHTUNKHWA

MADE AT
ISLAMABAD
ISLAMIC REPUBLIC OF PAKISTAN

AS OF 14-05- 2019

ENERGY PURCHASE AGREEMENT

This Energy Purchase Agreement (this "Agreement") is made and entered into as of 14th MAY 2019 at Islamabad, Pakistan.

By and between

Central Power Purchasing Agency (Guarantee) Limited, a guarantee limited company established under the laws of Pakistan, with its office at Shaheen Plaza, 73 West, Fazl-ul-Haq Road, Blue Area, Islamabad, Pakistan and its successors and assigns of the one part, (hereinafter called the "**Purchaser**").

and

Pakhtunkhwa Energy Development Organization (PEDO), formerly Pakhtunkhwa Hydel Development Organization (PHYDO), House # B-38/2, Phase-V, Hayatabad, Peshawar and its permitted successors and permitted assigns of the other part, (hereinafter called the "**Seller**").

Both the Purchaser and the Seller shall hereinafter also be referred to individually as the "**Party**" and collectively as the "**Parties**".

WHEREAS the Seller will sell and the Purchaser will purchase from the Seller, electrical energy on the terms and conditions set here-in-forth, pursuant to the Generation License and the Tariff Determination issued by NEPRA.

NOW THEREFORE, in consideration of the mutual benefits to be derived and the representations, warranties, conditions and promises herein contained, and intending to be legally bound, the Seller and the Purchaser hereby agree as follows: -

Wherever the following capitalized terms appear in this Agreement, they shall have the meanings stated below:

"Agreement Year" – Each period of twelve (12) consecutive months commencing on the Commercial Operations Date and on each anniversary thereof and ending at the end of the Day immediately prior to each immediately following anniversary of the Commercial Operations Date, except for the first Agreement Year which shall start on the Commercial Operations Date; provided, however, that each Agreement Year shall automatically be extended by the occurrence of a Force Majeure Event declared by the Seller or Buyer within such Agreement Year for a period equal to the sum of the Days, the Seller or Buyer was unable to perform fully due to such Force Majeure Event.

"Back-Up Metering System" – All meters and metering devices installed by the Seller and thereafter owned and maintained by the Seller as back-up to the Metering System.

"Billing Cycle" – the period starting from 00.00 hours of first day of each month and ending at 24.00 hours of the last day of the same month.

“**Business Day**” Any Day that banks in Islamabad, Pakistan are legally permitted to be open for business.

“**Commercial Operations Date**” – The Day immediately following the date on which the Complex is Commissioned;

“**Commissioned**” – The successful completion of commissioning of the Complex for continuous operation and the certification of such successful completion of commissioning to the Purchaser and the Seller by the independent engineer.

“**Complex**” – The generation facility or part thereof, located on site having installed capacity up to 17 MW and earmarked to deliver electrical energy to the Purchaser at Interconnection Point under this Agreement.

“**Control Centre**” – The National Power Control Centre located in Islamabad, or such other control centre designated by the Purchaser and notified to the Seller in writing from time to time, but not more than one at any time, from where the Complex shall be Despatched.

“**Despatch Instructions**”- means the instructions issued from the Control Centre on behalf of the Purchaser to the Seller for delivery of the electrical energy to the Interconnection Point on the basis of information provided by the Seller. It is agreed between the Parties that the Complex will be Despatched on **must-run basis** subject to availability of the Complex and hydrology for power generation.

“**Dispute**” – Any dispute or disagreement or difference arising under, in connection with or relating to this Agreement, including any dispute or difference concerning the existence, legality, validity or enforceability of this Agreement or any provision hereof, or the obligations or performance of a Party under any provision hereof.

“**Force Majeure**”- A "Force Majeure Event" shall mean any event or circumstance or combination of events or circumstances (including the effects thereof) that is beyond the reasonable control of a Party and that on or after the Commercial Operations Date, materially and adversely affects the performance by such affected Party of its obligations under or pursuant to this Agreement (including a Party's ability to deliver or receive energy from the Complex); provided, however, that such material and adverse effect could not have been prevented, overcome or remedied in whole or in part by the affected Party through the exercise of diligence and reasonable care, it being understood and agreed that reasonable care includes acts and activities to protect the Complex from a casualty or other event; that are reasonable in light of the probability of the occurrence of such event, the probable effect of such event if it should occur, and the likely efficacy of the protection measures.

“**Generation License**” – the license No. GL (Hydel)/12/2013 dated 27th November 2013 issued by NEPRA permitting generation and supply of electrical energy by the Seller from the Complex in accordance with the terms and conditions of such license.

“**Interconnection Facilities**” means the facilities and equipment to be designed, constructed or installed by or on behalf of the PESCO as per the Grid Code on the Purchaser's side of the Interconnection Point. The obligations/liability pertaining to the Interconnection Facilities will be borne by the PESCO.

"Interconnection Point" – The physical point(s) where the Complex and the 132-kV system of the PESCO as per the Grid Code is connected i.e. 132 kV bus-bar of the plant switchyard.

"Interconnection Works" means those works and activities to be undertaken by or on behalf of the PESCO as per the Grid Code for the design, engineering, construction, installation and commissioning of the Interconnection Facilities in accordance with this Agreement.

"KIBOR" – The average "ask side" Karachi Inter-Bank Offer Rate for Rupee deposits for a period equal to three (3) months issued by the State Bank of Pakistan.

"Metering Point" – The PESCO's side of the Interconnection Point as per the Grid Code.

"Metering System" – All existing meters and metering devices, already available at the Metering Point of the Complex of the Seller or procured by the PESCO and installed by the Seller, which shall be used for recording of electrical energy to be supplied to Purchaser. The accuracy class of meters shall be 0.2. The PESCO may check/recalibrate the Metering System at appropriate intervals, at its own cost.

"NEPRA" – The National Electric Power Regulatory Authority established by the Regulation, Transmission and Distribution of Electric Power Act 1997 (XL of 1997), and any successor or substitute regulatory agency with authority and jurisdiction over the electricity sector in Pakistan.

"Prudent Electrical Practices" – The use of equipment, practices or methods, as required to comply with applicable industry codes, standards, and regulations in Pakistan (i) to protect the grid system, employees, agents, and customers from mal-functions occurring at the Complex, and (ii) to protect the Complex and the Seller's employees and agents at the Complex from mal-functions occurring on the grid system. Prudent Electrical Practices are not limited to optimum practices, methods or acts to the exclusion of all other but rather are a spectrum of possible practices, methods and acts which could have been expected to accomplish the desired result at reasonable cost consistent with reliability and safety.

"Prudent Utility Practices" – Those practices, methods and procedures conforming to safety and legal requirements which are attained by exercising that degree of skill, diligence, prudence and foresight which would reasonably and ordinarily be expected from a skilled and experienced generator of electricity engaged in the same or a similar type of undertaking or activity under the same or similar circumstances and conditions to those pertaining in Pakistan and satisfying the health, safety and environmental standards of reputable international electric generation companies. Prudent Utility Practices are not limited to optimum practices, methods or acts to the exclusion of all others, but rather are a spectrum of possible practices methods and acts which could have been expected to accomplish the desired result at reasonable cost consistent with reliability and safety.

"Seller Interconnection Facilities" – means the facilities and equipment to be designed, constructed or installed by or on behalf of the Seller on the Seller's side of the Interconnection Point, including any tele-metering equipment, transmission lines, and associated equipment, transformers and associated equipment, relay and switching equipment, telecommunications devices, data interface for the SCADA System of the Control Centre, protective devices and safety equipment;

"Seller Interconnection Works" – means those works and activities to be undertaken by or on behalf of the Seller for the design, engineering, construction, installation and commissioning of the Seller Interconnection Facilities in accordance with this Agreement;

"Take-and-Pay Basis" – means the basis on which the Purchaser will pay to the Seller, the Tariff against the delivered kWh only. It is agreed between the Parties that the Complex will be despatched on must-run basis subject to availability of the Complex and hydrology for power generation.

"Tariff"-means the per kWh rate expressed in Pakistan rupees as set out in the Tariff Determination;

"Tariff Determination" - means the tariff approval no. NEPRA/TRF-231/PHYDO-2013/4264-4266 dated 29th April 2014 issued by NEPRA in relation to the Complex (as amended from time to time including any clarification thereto issued by NEPRA) as notified in the official Gazette, annexed herewith as Annex A;

"Year" – Each twelve (12) Month period commencing at 12:00 midnight on the 31st of December and ending at 12:00 midnight on the following 31st of December.

The Parties agree that:

- a) Unless terminated earlier in accordance with its terms, this Agreement shall continue in full force and effect for thirty (30) Agreement Years (such period, the **"Term"**), from the Commercial Operations Date in accordance with the term of Generation License.
- b) The Seller has obtained Generation License from NEPRA and the Parties agree that the Seller is fully capable to generate and sell the electrical energy to the Purchaser from the Commercial Operations Date. The Seller shall sell and the Purchaser shall purchase the electrical energy in accordance with Tariff Determination.
- c) The Seller will provide up to 17 MW of power on Take-and-Pay Basis at a voltage of 132 kV and at 50 Hz frequency with a tolerance of $\pm 10\%$ in nominal voltage and $\pm 3\%$ in nominal frequency. The quality of electrical energy shall be ensured by the Seller through installation of necessary equipment required as per Prudent Electrical Practices and Prudent Utility Practices.
- d) **Seller Interconnection Facilities:** The Seller shall complete or cause to be completed, at its cost, the Seller Interconnection Works with all proper skill and care and in all material respects in accordance with this Agreement and the applicable laws of Pakistan, such that the Seller Interconnection Facilities can be reasonably expected to provide a useful life of not less than the Term.
- e) **Interconnection Facilities:** The PESCO shall design, construct, finance and complete/commission the Interconnection Works in accordance with as per the Grid Code and the applicable laws of Pakistan, such that the Interconnection Facilities can be expected to have a useful life of not less than the Term.
- f) From and after the Commercial Operations Date, the Seller shall submit, at any time on or after the first (1st) Day of the month following such month (or part month), its invoice, monthly in arrear, based on levelized tariff allowed and indexed from time to time by

NEPRA up-to the bench mark energy and beyond the bench mark energy the tariff shall be applied @10% of levelized tariff, for the delivered net electrical energy based on the reading of Metering System for the Billing Cycle along with relevant supporting documents. The meter reading will be recorded by NTDC's / PESCO's authorized persons as per the Grid Code in the presence of the Seller's representative as per Billing Cycle. The Purchaser shall pay the amount shown in the invoice as due to the Seller (less any amount disputed by the Purchaser) at any time on or after the 30th Day the invoice is received by the Purchaser. In case the 30th Day is not a Business Day; the following Business Day shall be deemed to be the due date. Failure to settle the energy invoice in the given period shall carry late payment charges of KIBOR+2% per annum calculated for actual number of days on the basis of three hundred sixty-five days.

- g) The Seller may notify the Purchaser/Control Centre of its available energy in kWh estimated in good faith on daily/hourly basis, which may be revised any time by issuing a notice to the Purchaser/Control Centre prior to the issuance of Despatch Instructions. The Purchaser agrees that it shall not charge any liquidated damages under this Agreement for any outages or reduction in the estimated generation capacity or otherwise.
- h) It is agreed between the Parties that inability of generation facility to generate kWh in a given period of time on account of availability of water being less than the quantity estimated as per the hydrological assumptions/data (**Annex-B**) forming the basis of Tariff Determination shall be considered to be a Force Majeure Event. In case the Complex is available to generate and the Interconnection Facilities are not available to receive the energy, then such an event shall also be considered a Force Majeure Event under this Agreement.
- i) The Purchaser shall not charge any liquidated damages for non-compliance of the Despatch Instructions.
- j) The import of power by the Seller will be charged by the PESCO at the rate of tariff C-3 as notified by NEPRA for the respective distribution company.
- k) The Tariff will be adjusted for variation as per Tariff Determination by NEPRA.
- l) This Agreement may be suspended by the Seller upon issuance of written notice to the Purchaser of not less than thirty (30) Days issued by a Person duly authorized to issue such notice on behalf of the Seller. Upon the suspension of this Agreement the Parties shall have no further obligations or liabilities hereunder except, as per the provisions of this Agreement, for those obligations and liabilities that arose prior to such suspension.
- m) Provided that the Seller may, at any time, issue notice in writing of not less than thirty (30) Days, notifying the Purchaser of its intention to resume this Agreement. Following the lapse of this thirty (30) Days period, the Parties shall resume forthwith their respective rights and obligations under this Agreement.
- n) **Pass Through Item(s)**

Pass-Through Items shall be reimbursed by the Purchaser to the Seller on the basis of the actual costs reasonably incurred by the Seller and allowed by NEPRA to satisfy the

requirements of the Energy Purchase Agreement or to the extent that the Seller is obligated pursuant to the Laws of Pakistan to make payment for such Pass-Through Item(s) in the performance of its obligations under this Agreement.

The Seller may present an invoice(s) to the Purchaser for Pass-Through Items at any time on or after the first (1st) Day of the Month following the Month in which the cost(s) was incurred by the Seller. All invoices presented by the Seller to the Purchaser for Pass-Through items shall be accompanied by the original invoices and payment receipts to the Seller for which reimbursement of the Pass-Through item from the Purchaser is being sought.

The following items shall be Pass-Through Items:

Sales Tax, Excise Duty or other Duty, levy, charge, surcharge or other governmental impositions wherever and whenever payable on sale of Electricity by the Seller to the Purchaser during the term provided that Seller has not been previously compensated for any such item by the Purchaser or the GOP.

Withholding Tax on Dividend as may be determined by NEPRA from time to time

For avoidance of doubt, if a particular type of tax is stated to be a Pass-Through Item in this section (n) then any change in tax rate for such tax upwards or downwards shall continue to be treated as a Pass-Through Item.

- o) All notices and other communications required or permitted to be given by a Party shall be in writing and either delivered personally or by courier or sent by facsimile to the address or number of the other Party specified below:

If to the Purchaser:

Attention: Chief Executive Officer
Central Power Purchase Agency Guarantee Limited
Address: Shaheen Plaza, Plot no.73-West, Fazal-ul-Haq Road, Blue Area, Islamabad.
Facsimile: 051-9213617
Email: ceo@cpga.gov.pk

If to the Seller:

Attention: Chief Executive Officer
Pakhtunkhwa Energy Development Organization (PEDO)
38-B/2, Phase-V, Hayatabad, Peshawar, KP

Provided that a Party may change the address to which notices are to be sent to it, by giving no less than thirty (30) Days' prior written notice to the other Party.

- p) No notice or other communication shall be effective until received or deemed received. Notices or other communications shall be deemed to have been received by the receiving Party:

- (i) when delivered, if personally delivered;
 - (ii) two (2) Business Days after sending, if sent by courier;
 - (iii) upon sending, if sent by facsimile, subject to confirmation of an uninterrupted transmission report and provided that a hard copy is dispatched to the recipient by courier or personal delivery no later than the following Business Day.
- q) The Seller shall install the Back-Up Metering System with meters of 0.2 accuracy class in the metering room at Seller's premises and tested and calibrated in the presence of NTDC's / PESCO's authorized representative as per the Grid Code. Parties agree that, in case of doubt by any Party about the accuracy of Metering System, the recordings of the Back-Up Metering System or any other mutually agreed arrangement may be adopted. In the event of complete or partial damage to the Metering System the same shall be replaced by the Seller. On the initial or any subsequent replacement of the Metering System, the NTDC / PESCO shall have the right to affix seals on the tested and calibrated meters but in the presence of Seller's authorized representative.
- r) If either of the Metering System differs from the other by an amount greater than one-fifth of one percent (0.2%), the NTDC / PESCO shall test the accuracy of the Metering System and recalibrate the Metering System. If the Metering System is found to be in order, the Seller shall be bound to test and calibrate the Back-Up Metering System to the satisfaction of the Purchaser. Either Party shall give prior notice, not less than seventy-two (72) hours to conduct such tests.
- s) The Seller shall provide its maintenance schedule to the NTDC / PESCO with a copy to Purchaser, so as to ensure stable and reliable supply to NTDC / PESCO network.
- t) The Seller shall serve at least 48-hour notice to the Purchaser regarding any planned shutdown. The Seller has the right to immediately disconnect the power supply to the Purchaser in the event of any breakdown of machineries in the Complex and will intimate to Purchaser.
- u) The Seller will immediately inform the Purchaser about power supply failure due to defect/mal-operation of the Complex.
- v) In the event that a Dispute arises, the Parties shall attempt in good faith to settle such Dispute through their Chief Executive Officers (CEOs) by mutual discussion(s) within thirty (30) days after the date that the disputing Party delivers written notice of the Dispute to the other Party.
- w) The Party reporting the existence of a Dispute shall give to the other Party written notice setting out the material particulars of the Dispute in the written notice. Chief Executive Officer (CEOs) of each Party shall meet in Islamabad, Pakistan to attempt in good faith to resolve the Dispute.
- x) In case the Dispute is not resolved within thirty (30) days after the date of receipt of notice described in section (t) by the relevant Party (or within such longer period of time as the

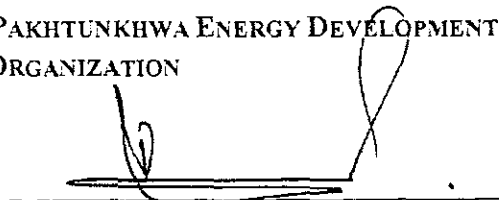
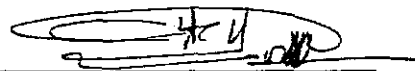
Parties may agree), any Party may initiate arbitration proceedings under the Arbitration Act 1940, and the jurisdiction in such cases would be that of the relevant court in Pakistan.

- y) The arbitration shall be conducted in Islamabad, Pakistan.
- z) All permissions, consents required by the Seller from different agencies such as NEPRA etc. will be arranged by the Seller at its sole cost and expense.
- aa) This Agreement may be executed in two (2) counterparts and each counterpart will be deemed an original instrument, but both the counterparts together will constitute one Agreement. The Agreement shall be effective upon the approval of Board of Director of the Parties.
- bb) This Agreement may be terminated by either Party upon issuance of written notice to the other Party of not less than ninety (90) Days issued by a Person duly authorized to issue such notice on behalf of the notifying Party. Upon the termination of this Agreement the Parties shall have no further obligations or liabilities hereunder except, as per the provisions of this Agreement, for those obligations and liabilities that (a) arose prior to such termination and (b) have been made to survive termination.

IN WITNESS whereof the Parties hereto have signed this Agreement on the day and year first above written.

CENTRAL POWER PURCHASING AGENCY
(GUARANTEE) LIMITED

PAKHTUNKHWA ENERGY DEVELOPMENT
ORGANIZATION

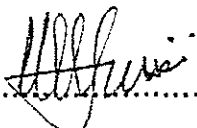


By: ABID LATIF LODHI

By: Engr. Bahadur Shah

Title: Chief Executive Officer

Title: Chief Executive Officer

Witness: 

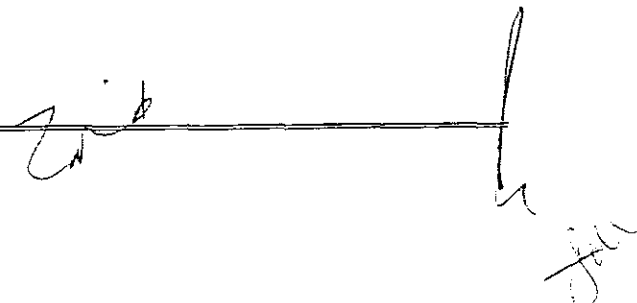
Witness: 

Name: Mansoor Hussain

Name: SYED ZAINULLAH SHAH
(Secretary EP)

CNIC #: 32304-1651192-7

CNIC #: 173016596176-1

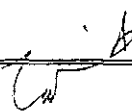


ANNEXURE A

(NEPRA Determined Tariff)

ANNEXURE B

(Monthly Hydrology Data)



Annexure 2:
Letter of CPPA-G

1/11

Annexure 3

Tariff Comparison Schedule

S.A.

Tariff Comparison Schedule

under Rule 3(2)(d) of NEPRA (Tariff Standards and Procedure) Rules, 1998

Sr.		Original Tariff Determination	Modification Petition
1	Levelized Tariff	4.1245 Rs/kWh	3.8077 Rs/kWh
2	Project Cost	USD 36.272 Million	USD 36.272 Million
3	Debt: Equity	80:20	80:20
4	Loan Tenor	20 years	30 years
5	Reference Exchange Rate	97	97
6	Tariff basis	Take or Pay	Take and Pay

Se