TO BE PUBLISHED IN THE GAZETTE OF PAKISTAN
EXTRA ORDINARY, PART-I

National Electric Power Regulatory Authority

NOTIFICATION

Islamabad, the 27th day of May, 2022

S.R.O. 741 **(I)/2022.**- In pursuance of Sub-Section 7 of Section 31 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (XL of 1997), NEPRA hereby notifies the Decision of the Authority in the matter of Motion for Leave for Review filed by Pakhtunkhwa Energy Development Organization (PEDO) for 40.8 MW Koto Hydropower Project in Case No. NEPRA/TRF-523/KHP-2020.

2. While effecting the Decision, the concerned entities including Central Power Purchasing Agency Guarantee Limited (CPPAGL) shall keep in view and strictly comply with the orders of the courts notwithstanding this Decision.

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(Syed Safeer Hussain)
Registrar

DECISION OF THE AUTHORITY IN THE MATTER OF MOTION FOR LEAVE FOR REVIEW FILED BY PAKHTUNKHWA ENERGY DEVELOPMENT ORGANIZATION (PEDO) FOR 40.8 MW KOTO HYDROPOWER PROJECT.

1. Pakhtunkhwa Energy Development Organization (hereinafter referred to as the "Petitioner" or PEDO), vide its letter dated March 24, 2021, filed a motion for leave for review (hereinafter referred to as "Review Motion"), seeking review of the determination of National Electric Power Regulatory Authority (hereinafter referred to as "the Authority") dated March 10, 2021, in the matter of determination of tariff for 40 MW Koto hydropower project (hereinafter referred to as "impugned determination").

2. The Review Motion was considered and admitted on April 06, 2021, for further proceedings. It was also decided to provide an opportunity of hearing to the parties to the proceedings; accordingly, the hearing in this regard was held on May 25, 2021, through online application zoom for which letters of invitation were sent for seeking comments. The hearing was attended by the Petitioner, CPPA-G, and other stakeholders.

3. **Grounds of Review Motion:** The Petitioner requested for the review of following parameters in the review motion;
   - i. Benchmark Energy
   - ii. Police Security Cost
   - iii. Management Consultancy (MC) Cost
   - iv. Project Management Unit (PMU) Cost
   - v. Terms & conditions of debt
   - vi. O&M Cost
   - vii. Return on Equity (ROE)

4. The submissions of the Petitioner are as follows:

i. **Benchmark Energy**: In the original tariff petition, an installed capacity of 40.8 MW was submitted for Koto HPP and based on 2% auxiliary, the net available MWs are 39.984 MW. As the Project is based on Take & Pay basis and there are no allowed outages under Take & Pay mechanism, the tariff must be calculated based on 328.5 days operation per annum instead of 365 days. The energy quantum for the tariff calculations should be calculated according to the following parameters:

Plant Capacity	40.80 MW
Auxiliary Consumption	0.5%
Operational Days	328.5
Saleable Energy	183.393 GWh

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
NEPRA AUTHORITY

ii. **Police Security Cost:** In the tariff petition, an amount of Rs.215.6 million was requested as a police security cost but it was disallowed by the Authority by citing the reason that this cost is the responsibility of the provincial government. Since this external security has to be arranged and paid by PEDO, therefore the same should be allowed.

iii. **Management Consultancy (MC) Cost:** In the tariff petition MC cost of Rs. 263.95 million inclusive of Rs. 13.95 million for hiring the services of an Independent Engineer (IE) and Rs 5 million for provisional sum. The Authority should reconsider the impugned determination in this regard and allow Rs 13.95 million and Rs 5 million on account of Independent Engineer and provisional sum in addition to Rs 228.25 million already allowed in the impugned determination.

iv. **Project Management Unit (PMU) Cost:** The PMU cost covers the project establishment for the preconstruction as well as employer's cost during construction and accordingly an amount of USD 0.642 million was claimed under this head. However, the Authority in the impugned determination approved an amount of USD 0.22 million based on the assessment of the previous projects. The claimed cost in the original petition is well justified for a Project having a construction period of 48 months and the same was also duly approved by the competent authority i.e., the Ministry of Finance and other offices of the provincial government. Therefore, the same should be allowed.

v. **Terms & Conditions of Debt:** In the original tariff petition, KIBOR of 8% plus a spread of 2.5% with a loan repayment period of 10 years was proposed, whereas the Authority in the impugned determination approved only KIBOR without any spread by amortizing the loan over 30 years. The amortization of loan over 30 years is accepted, however, the spread of 2.5% over KIBOR should be allowed which is also consistent with Authority's tariff benchmarks 2018.

vi. **O&M Cost:** The Authority has approved an O&M cost of Rs.142. million per annum against the requested amount of Rs. 155 million per annum. The original O&M estimates were based at 2.3% of Capex minus IDC but we proposed O&M cost at @ 1% of CAPEX per annum minus IDC to lower the tariff which works out as Rs 155 million per annum and the same should be allowed.

vii. **Return on Equity (ROE)** The Authority has reduced ROE to 10% against 16% requested. The Project was approved by ECNEC in July 2017 and an EPC was signed in January 2015, since the Project was conceived earlier, therefore, the decision of reducing the ROE from 16% to 10% should be implemented on future projects instead of applying it on this Project. Further, the CCoE decision also provides compensation to WAPDA and Gencos as a result of a reduction in respective ROE, similar compensation should also be provided to the Project otherwise, 16% return should be allowed.

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
NEPRA
AUTHORITY

5. Submissions of the stakeholders and response of the Petitioner:

i. **Benchmark Energy:** CPPA-G vide letter dated June 01, 2021 submitted that the concept of allowance for scheduled outage/forced outage came in those tariffs where the tariff is calculated on the availability of the Complex because the tariff cannot be calculated on 100% availability. Even in the Power Purchase Agreement (PPA), where a two-part tariff is allowed by the Authority, the concept of low hydrology is there. While referring to section 6.3 (h) of the PPA of 84 MW Laraib and section 6.3 (f) of the PPA of 81 MW Malakand-III hydropower CPPA-G recommended that plants have to be maintained in such a manner that during the high flow period maximum output shall be ensured to achieve benchmark energy and this benchmark has been calculated in the feasibility study of individual projects from where data of the plants have been taken by the Authority. During the low period, the necessary maintenance can be performed on the Units of the Complex. CPPA-G stated that although, the Authority has considered the same method of calculation of benchmark energy in the tariff determination of M/s Rialli-II Hydropower (Pvt.) Limited and M/s Kathai-II Hydropower (Pvt.) Limited and CPPA-G agreed with the stance of the Authority on the calculation of saleable energy.

In response to the CPPA-G letter, PEDO vide letter dated June 23, 2021, submitted that CPPA-G has commented that outage hours should not be subtracted while calculating benchmark energy. PEDO cited the paragraph of PPA of Laraib Energy Limited wherein it has been stated that *"Laraib is based on two-part payments and hence receives payments even during allowed outage hours. In addition, as per the paragraph quoted by CPPA-G Laraib enjoys leverage of possibility of conducting scheduled outages during low flow seasons and that period not being counted toward outage allowance."*. As per PEDO, in the case of Koto Project, it receives payment only for the energy sold and thus there is no period for scheduled and or forced outage in the EPA. Therefore, benchmark energy must be calculated only for the period during which the Project generates electricity.

ii. **Terms & Conditions of Debt**: CPPA-G submitted that the Authority allowed cost of debt at 6 months KIBOR (that is 7.3%) without any spread which shall be adjusted biannually with any variation in KIBOR. Since the Project is financed by the Hydel Development Fund and not from any financial institution. It is, therefore, requested that the spread claimed by the PEDO seems to be irrational which only covers the banking costs between lending and borrowing. In light of the above, CPPA-G endorsed the Authority's decision in this regard.

In response to the above CPPA-G's comments, PEDO vide letter dated June 23, 2021, while referring to NEPRA's Tariff Benchmark decision dated 2018 stated that for projects securing financing through Non—banking resources, spread shall be allowed as per Authority decision (but not zero). Hence, PEDO requested NEPRA for a spread of 2.5% over KIBOR.

iii. **Return on Equity (ROE)**: CPPA-G stated that NEPRA allowed a return of 10% for the Project in line with WAPDA Hydro projects with no USD indexation. Furthermore, the Neelum Jhelum

hydropower project also claimed Return on Equity of 10% in its tariff submission before NEPRA. Thus CPPA-G endorsed the Authority's decision in this regard.

In response to CPPA-G comments, PEDO submitted that Neelum Jhelum's equity has been raised through the imposition of NJ-surcharge in consumer's bill as a burden on consumers. According to PEDO, NJ does not qualify for any ROE as the funds have not been raised by WAPDA. In the case of Koto HPP, entire funding including equity has been raised from PEDO's own resources and thus it requested to allow a return of 16% p.a

6. Arguments heard and record perused.

7. As per regulation 3(2) of the National Electric Power Regulatory Authority (Review Procedure) Regulations, 2009, "any party who is aggrieved from any order of the Authority and who, from the discovery of new and important matter of evidence or on account of some mistake or error apparent on the face of the record or from any other sufficient reasons, may file a motion seeking review of such order".

8. In the instance case, it is observed that the majority of the submissions made in the Review Motion were already deliberated upon in the impugned determination. The Authority is of the view that only the following grounds merit consideration and certain clarifications:-

   i. Project Management Unit (PMU) Cost
   ii. Terms & conditions of debt
   iii. Return on Equity (ROE)

9. **Project Management Unit (PMU) Cost:** The Authority while assessing this cost relied upon the benchmark costs approved for other comparable hydropower projects being set up under the Asian Development Bank's Renewable Energy Development Sector Investment Program (herein referred to as REDSIP) like Marala 7.64 MW, and Chianwali 5.38 MW, etc. The same cost was also approved for PEDO's Daral Khawar 36.6 MW hydropower project. This indicates that the benchmark cost is reasonable, however keeping in view that since the Project is still under the construction stage and PMU is still functionary, the Authority may review the prudently incurred cost (not exceeding the amount requested i.e. Rs.99.20 million) at the time of COD tariff adjustment upon the submission of the authentic documentary evidence to the satisfaction of the Authority. In view thereof, the Authority has decided to maintain its earlier decision in this regard.

10. **Terms and Conditions of the Debt:** The cost of financing was allowed to the Petitioner keeping in view the submissions made to the Authority during the proceeding of the impugned determination where it has been stated that the funds secured were from Hydel Development Fund (HDF). Similarly, in the instant Review Motion, nothing has been placed before the Authority as a record that would otherwise refute that understanding regarding the sources of funds for the Project. Therefore, the Authority maintains its earlier decision in the matter.

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
NEPRA AUTHORITY

However, if PEDO establishes that sources of financing for the Project are other than HDF, the Authority may review the matter at the time of COD tariff adjustment upon the submission of authentic documentary evidence to the satisfaction of the Authority.

11. **Return on Equity:** The Authority carefully reviewed the submission of the Petitioner and commentator in this regard and is of the opinion that investments in hydropower projects caries risk and accordingly reasonable return should be allowed. The Authority also noted that recently local currency long-term bonds are offering interest which is slightly higher than the RoE of 10% allowed to the Project. It was observed that the Government of Khyber Pakhtunkhwa should have incentives to invest in developing local hydro resources than investing in long-term bonds whose returns have recently increased. Given the above, the Authority has decided to enhance the return from 10% to 13% for the Project without any USD indexation.

12. **Pre-COD sale:** The Authority also noted that going forward, clarity should be given with regards to the Pre-COD sale. It was noted that in the impugned determination, Pre-CoD was subject to the terms and conditions of EPA but the applicable tariff component included O&M (fixed & variable) and insurance. To bring further clarity and consistency with the standard PPA which is also prevalent in other hydro tariff determinations, the Authority has decided to allow Pre-CoD sale to the extent of component of variable O&M only, as payment of Water Use Charge is not relevant in the instant case.

13. **Order:** In pursuance of section 7(3)(a) of the Regulation of Generation, Transmission, and Distribution of Electric Power Act, 1997 read with NEPRA (Tariff Standards & Procedure) Rules, 1998, the Authority hereby determines and approves the following generation tariff along with the terms and conditions for Koto Hydropower Project of Pakhtunkhwa Energy Development Organization (the Petitioner) for delivery of electricity to Power Purchaser:

    i) Levellized tariff works out to be Rs. 8.2481 /kWh (US Cents 5.1550/kWh)

    ii) EPC cost of US$ 74.02 million has been approved.

    iii) Non-EPC cost of Rs. 263.45 million which includes Management Consultancy Cost of Rs. 228.25 million and Project Management Unit Cost of Rs. 35.2 million has been approved .

    iv) Land and resettlement of Rs. 527.93 million (US$ 3.30 million) has been assumed.

    v) Debt to equity ratio of 80:20 has been approved.

    vi) Debt repayment period of 30 years has been taken into account for a 100% local loan.

    vii) The KIBOR rate of 7.30% has been taken into account while assessing debt servicing.

    viii) Annual ROE & ROEDC at 13% has been approved.

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
NEPRA AUTHORITY

ix) The reference tariff has been calculated on the basis of net annual benchmark energy generation of 207.6129 GWh for an installed capacity of 40.8 MW. An auxiliary consumption has been restricted to 1%.

x) The above charges will be limited to the extent of net annual energy generation of 207.6129 GWh. Net annual generation supplied during a year to the Power Purchaser in excess of benchmark energy of 207.6129 GWh will be charged at 10% of the prevalent approved tariff.

xi) O&M cost of Rs. 142.53 million per annum has been approved.

xii) Insurance during the operation has been calculated as 0.75% of the EPC cost.

xiii) The reference Rs./US$ rate has been taken as 160.

xiv) The construction period of 48 months has been approved and the same is used for the workings of ROEDC and IDC.

xv) IDC and ROEDC have been worked out using the following drawdown schedule:

Period	Draw Down (%)
06	20
12	10
18	10
24	15
30	15
36	10
42	10
48	10

xvi) In the above tariff, no adjustment for carbon emission reduction receipts has been accounted for. However, upon actual realization of carbon emission reduction receipts, the same shall be distributed between the Power Purchaser and the Petitioner in accordance with the approved mechanism given in the applicable government policy.

xvii) The above tariff is applicable for a period of thirty years commencing from the commercial operations date (COD).

xviii) The tariff is based on Take & Pay, with must-run provision, accordingly a single part tariff has been allowed to the Project.

xix) The component-wise tariff is indicated as Annex-I.

xx) Debt Servicing Schedule is attached as Annex-II.

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
NEPRA
AUTHORITY

I. **One Time Adjustments**

The following one-time adjustments shall be applicable to the reference tariff:

a. Out of the total approved EPC cost of USD 74.02 million , 50% (USD 37.01 million) shall be adjusted at COD on account of variation in Rs./USD parity during the construction period, on the production of authentic documentary evidence by the Petitioner to the satisfaction of the Authority. The remaining half amounting to Rs. 5,921.60 million shall remain the same and no variation in the cost of civil works will be allowed. The lower of actual or approved shall be taken into account at the COD tariff adjustment.

b. Any liquidated damages, penalties, etc. (by whatever name called), actually recoverable by the Petitioner from the EPC contractor(s), pertaining to the construction period allowed by the Authority, will be adjusted in the project cost at COD.

c. Land and resettlement costs will be allowed as per actual, as against Rs. 527.93 million (US$ 3.30 million) allowed now, upon production of verifiable documentary evidence.

d. If no insurance cost has been incurred during the operation phase of the power plant or the same is the part of the O&M cost, the assumed calculated tariff component shall be excluded from the tariff components at the COD stage.

e. Interest During Construction (IDC) will be adjusted at COD on the basis of actual debt composition, debt drawdown of loan (not exceeding the amount allowed by the Authority), and based on the applicable interest rate during the actual project construction period (not exceeding the construction period allowed by the Authority).

f. The return on equity (including return on equity during construction) will be adjusted at COD on the basis of actual equity injections (within the overall equity allowed by the Authority at COD), during the project construction period allowed by the Authority.

g. The reference tariff table shall be revised at COD while taking into account the above adjustments. The Petitioner shall submit its request to the Authority within 90 days of COD for necessary adjustments in tariff at the time of COD.

II. **Indexations:**

The following indexation shall be applicable to the reference tariff:

i) Indexation applicable to O&M

The local part of O&M cost will be adjusted on account of local inflation and the O&M foreign component will be adjusted on account of variation in dollar/rupee exchange rate and US CPI. Quarterly adjustments for inflation and exchange rate variation will be made on 1st July, 1st October, 1st January, and 1st April respectively on the basis of the latest

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
NEPRA
AUTHORITY

available information with respect to CPI - General (notified by the Pakistan Bureau of Statistics), US CPI (notified by US Bureau of Labor Statistics) and revised TT & OD selling rate of US Dollar as notified by the National Bank of Pakistan. The mode of indexations will be as follows:

$F\ O\&M_{(LREV)} = F\ O\&M_{(LREF)} * CPI_{(REV)} / CPI_{(REF)}$

$F\ O\&M_{(FREV)} = F\ O\&M_{(FREF)} * US\ CPI_{(REV)} / US\ CPI_{(REF)} * ER_{(REV)} / ER_{(REF)}$

$V\ O\ \&\ M_{(LREV)} = V\ O\&M_{(LREF)} * CPI_{(REV)} / CPI_{(REF)}$

Where;

$F\ O\&M_{(LREV)}$	=	The revised applicable fixed O&M local component of tariff
$F\ O\&M_{(FREV)}$	=	The revised applicable fixed O&M foreign component of tariff
$V\ O\&M_{(LREV)}$	=	The revised applicable variable O&M local component of tariff
$FO\&M_{(LREF)}$	=	The reference fixed O&M local component of tariff for the relevant period
$FO\&M_{(FREF)}$	=	The reference fixed O&M foreign component of tariff for the relevant period
$VO\&M_{(LREF)}$	=	The reference variable O&M local component of tariff for the relevant period
$CPI_{(REV)}$	=	The revised Consumer Price Index (N-CPI) as notified by the Pakistan Bureau of Statistics
$CPI_{(REF)}$	=	140.86 Consumer Price Index (N-CPI) of December 2020 notified by the Pakistan Bureau of Statistics
$US\ CPI_{(REV)}$	=	The revised US CPI (all urban consumers)
$US\ CPI_{(REF)}$	=	260.474 US CPI (all urban consumers) for the month of December 2020 as notified by the US Bureau of Labor Statistics
$ER_{(REV)}$	=	The revised TT & OD selling rate of US dollar as notified by the National Bank of Pakistan
$ER_{(REF)}$	=	The reference TT & OD selling rate of US dollar as notified by the National Bank of Pakistan - Current reference 160.

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
NEPRA
AUTHORITY

ii) Adjustment of the insurance component

The insurance component of the reference tariff will be adjusted as per actual incurred prudent costs, subject to the maximum ceiling of 1% of the approved EPC cost, on an annual basis upon production of authentic documentary evidence by the Petitioner.

iii) Adjustment for KIBOR variation

The interest part of the debt service component will remain unchanged throughout the term except for the adjustment due to variation in 6 months KIBOR, according to the following formula:

$$\Delta I = P_{(REV)} * (KIBOR_{(REV)} - 7.30\%) / 2$$

Where:

ΔI = the variation in interest charges applicable corresponding to variation in 6 months KIBOR. Δ I can be positive or negative depending upon whether 6 months $KIBOR_{(Rev)}$ per annum > or < 7.30%. The interest payment obligation will be enhanced or reduced to the extent of Δ I for each half-year under adjustment.

$P_{(REV)}$ = is the outstanding principal (as indicated in the attached debt servicing schedule to this order at Annex-II) on a bi-annual basis at the relevant calculations date.

$KIBOR_{(REV)}$ = Revised 06-month KIBOR as at the last day of the proceeding biannual period as notified by the National Bank of Pakistan.

III. **Terms and Conditions of Tariff:**

Design & Manufacturing Standards:

Hydropower generation systems shall be designed, manufactured, and tested in accordance with the latest IEC standards or other equivalent standards. All plants and equipment shall be new.

Emissions Trading/ Carbon Credits:

The Petitioner shall process and obtain emissions/carbon credits expeditiously and credit the proceeds to the Power Purchaser as per the applicable government policy and the terms and conditions agreed between the Petitioner and the Power Purchaser.

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
NEPRA AUTHORITY

Power Curve of the Hydel Power Complex:

The power curve of the Hydel Power plant shall be verified by the Power Purchaser, as part of the Commissioning tests according to the latest IEC standards and shall be used to measure the performance of the hydel generating units.

Others:

i. The Authority has allowed/approved only those cost(s), terms term(s), condition(s), provision(s), etc. which have been specifically approved in this tariff determination. Any cost(s), term(s), condition(s), provision(s), etc. contained in the tariff petition or any other document which are not specifically allowed/approved in this tariff determination, should not be implied to be approved, if not adjudicated upon in this tariff determination.

ii. The above tariff and terms and conditions shall be incorporated as the specified tariff approved by the Authority pursuant to Rule 6 of the National Electric Power Regulatory Authority Licensing (Generation) Rules, 2000 in the power purchase agreement between the Petitioner and the Power Purchaser. General assumptions, which are not covered in this determination, may be dealt with as per the standard terms of the PPA.

iii. In case the PEDO wants to exit and sell the energy from Koto HPP to the buyer(s) other than the national grid/CPPA-G/DISCOs then the terms of such arrangement shall be mutually agreed between parties to the EPA and, reflected in the draft EPA and submitted before the approval of the Authority .

iv. In case the company earns annual profit in excess of the approved return on equity (including ROEDC), then that extra amount shall be shared between the power producer and consumers through a clawback mechanism to be decided by the Authority at the time of COD tariff adjustment.

v. Pre COD sale of electricity is allowed to the project company, subject to the terms and conditions of EPA, at the applicable tariff only including variable O&M component. However, pre COD sales will not alter the required commercial operations date stipulated by the EPA in any manner.

vi. In case the company is obligated to pay any tax on its income from generation of electricity, or any duties and/or taxes, not being of refundable nature, are imposed on the company, the exact amount paid by the company on these accounts shall be reimbursed on production of original receipts. This payment shall be considered as a pass-through payment. However, withholding tax on dividends shall not be a pass-through item.

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
NEPRA
AUTHORITY

vii. Hydrological Risk shall be borne by the Power Producer.

14. The order along with the reference tariff table attached as Annex-I and debt servicing schedule attached as Annex-II thereto are recommended for notification by the Federal Government in the official gazette in accordance with Section 31(7) of the Regulation of Generation, Transmission, and Distribution of Electric Power Act, 1997.

AUTHORITY

Rehmatullah Baloch
Member

Rafique Ahmed Shaikh
Member

Engr. Maqsood Anwar Khan
Member

Tauseef H. Farooqi
Chairman

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
NEPRA
AUTHORITY

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KOTO HYDROPOWER PROJECT
REFERENCE TARIFF TABLE

Year	(PKR/kWh)								Total PKR/kWh
	Variable O&M	Fixed O&M		Insurance	ROEDC	ROE	Debt Servicing		
	Local	Foreign	Local				Principal	Interest	
1	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	0.5552	4.1304	8.2481
2	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	0.5965	4.0892	8.2481
3	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	0.6408	4.0448	8.2481
4	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	0.6885	3.9972	8.2481
5	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	0.7396	3.9460	8.2481
6	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	0.7946	3.8910	8.2481
7	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	0.8537	3.8320	8.2481
8	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	0.9171	3.7685	8.2481
9	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	0.9853	3.7003	8.2481
10	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	1.0586	3.6271	8.2481
11	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	1.1372	3.5484	8.2481
12	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	1.2218	3.4639	8.2481
13	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	1.3126	3.3731	8.2481
14	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	1.4102	3.2755	8.2481
15	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	1.5150	3.1707	8.2481
16	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	1.6276	3.0581	8.2481
17	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	1.7486	2.9371	8.2481
18	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	1.8785	2.8071	8.2481
19	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	2.0182	2.6675	8.2481
20	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	2.1682	2.5174	8.2481
21	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	2.3294	2.3563	8.2481
22	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	2.5025	2.1831	8.2481
23	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	2.6885	1.9971	8.2481
24	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	2.8884	1.7973	8.2481
25	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	3.1031	1.5826	8.2481
26	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	3.3337	1.3519	8.2481
27	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	3.5815	1.1041	8.2481
28	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	3.8478	0.8379	8.2481
29	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	4.1338	0.5519	8.2481
30	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	4.4410	0.2446	8.2481
Levelized Tariff	0.1030	0.3501	0.2334	0.4278	0.7062	1.7418	1.1646	3.5211	8.2481

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
NEPRA
AUTHORITY

Annex-II

KOTO HYDROPOWER PROJECT
DEBT SERVICING SCHEDULE (LOCAL)

Period	Opening Balance PKR in Million	Mark-UP PKR in Million	Principle Repayment PKR in Million	Debt Servicing PKR in Million	Closing Balance PKR in Million	Annual Principal Repayment- Rs./kWh	Annual Interest Rs./kWh	Annual Debt Servicing Rs./kWh
	11,775	430	57	486	11,719			
	11,719	428	59	486	11,660			
1	11,775	858	115	973	11,660	0.5552	4.1304	4.6856
	11,660	426	61	486	11,599			
	11,599	423	63	486	11,536			
2	11,660	849	124	973	11,536	0.5965	4.0892	4.6856
	11,536	421	65	486	11,471			
	11,471	419	68	486	11,403			
3	11,536	840	133	973	11,403	0.6408	4.0448	4.6856
	11,403	416	70	486	11,333			
	11,333	414	73	486	11,260			
4	11,403	830	143	973	11,260	0.6885	3.9972	4.6856
	11,260	411	75	486	11,185			
	11,185	408	78	486	11,107			
5	11,260	819	154	973	11,107	0.7396	3.9460	4.6856
	11,107	405	81	486	11,026			
	11,026	402	84	486	10,942			
6	11,107	808	165	973	10,942	0.7946	3.8910	4.6856
	10,942	399	87	486	10,855			
	10,855	396	90	486	10,764			
7	10,942	796	177	973	10,764	0.8537	3.8320	4.6856
	10,764	393	93	486	10,671			
	10,671	389	97	486	10,574			
8	10,764	782	190	973	10,574	0.9171	3.7685	4.6856
	10,574	386	100	486	10,474			
	10,474	382	104	486	10,369			
9	10,574	768	205	973	10,369	0.9853	3.7003	4.6856
	10,369	378	108	486	10,262			
	10,262	375	112	486	10,150			
10	10,369	753	220	973	10,150	1.0586	3.6271	4.6856
	10,150	370	116	486	10,034			
	10,034	366	120	486	9,914			
11	10,150	737	236	973	9,914	1.1372	3.5484	4.6856
	9,914	362	125	486	9,789			
	9,789	357	129	486	9,660			
12	9,914	719	254	973	9,660	1.2218	3.4639	4.6856
	9,660	353	134	486	9,526			
	9,526	348	139	486	9,387			
13	9,660	700	273	973	9,387	1.3126	3.3731	4.6855
	9,387	343	144	486	9,244			
	9,244	337	149	486	9,095			
14	9,387	680	293	973	9,095	1.4102	3.2755	4.6856
	9,095	332	154	486	8,940			
	8,940	326	160	486	8,780			
15	9,095	658	315	973	8,780	1.5150	3.1707	4.6856
	8,780	320	166	486	8,614			
	8,614	314	172	486	8,442			
16	8,780	635	338	973	8,442	1.6276	3.0581	4.6856
	8,442	308	178	486	8,264			
	8,264	302	185	486	8,079			
17	8,442	610	363	973	8,079	1.7486	2.9371	4.6856
	8,079	295	192	486	7,888			
	7,888	288	199	486	7,689			
18	8,079	583	390	973	7,689	1.8785	2.8071	4.6856
	7,689	281	206	486	7,483			
	7,483	273	213	486	7,270			
19	7,689	554	419	973	7,270	2.0182	2.6675	4.6856
	7,270	265	221	486	7,049			
	7,049	257	229	486	6,820			
20	7,270	523	450	973	6,820	2.1682	2.5174	4.6856
	6,820	249	237	486	6,583			
	6,583	240	246	486	6,336			
21	6,820	489	484	973	6,336	2.3294	2.3563	4.6856
	6,336	231	255	486	6,081			
	6,081	222	264	486	5,817			
22	6,336	453	520	973	5,817	2.5025	2.1831	4.6856
	5,817	212	274	486	5,543			
	5,543	202	284	486	5,259			
23	5,817	415	558	973	5,259	2.6885	1.9971	4.6856
	5,259	192	294	486	4,964			
	4,964	181	305	486	4,659			
24	5,259	373	600	973	4,659	2.8884	1.7973	4.6856
	4,659	170	316	486	4,343			
	4,343	159	328	486	4,015			
25	4,659	329	644	973	4,015	3.1031	1.5826	4.6856
	4,015	147	340	486	3,675			
	3,675	134	352	486	3,323			
26	4,015	281	692	973	3,323	3.3337	1.3519	4.6856
	3,323	121	365	486	2,958			
	2,958	108	378	486	2,579			
27	3,323	229	744	973	2,579	3.5815	1.1041	4.6856
	2,579	94	392	486	2,187			
	2,187	80	407	486	1,780			
28	2,579	174	799	973	1,780	3.8478	0.8379	4.6856
	1,780	65	421	486	1,359			
	1,359	50	437	486	922			
29	1,780	115	858	973	922	4.1338	0.5519	4.6856
	922	34	453	486	469			
	469	17	469	486	0			
30	922	51	922	973	0	4.4410	0.2446	4.6856

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
NEPRA
AUTHORITY

National Electric Power Regulatory Authority
Islamic Republic of Pakistan

REGISTRAR

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Subject: **NOTIFICATION REGARDING THE DECISION OF THE AUTHORITY IN THE MATTER OF MOTION FOR LEAVE FOR REVIEW FILED BY PAKHTUNKHWA ENERGY DEVELOPMENT ORGANIZATION (PEDO) FOR 40.8 MW KOTO HYDROPOWER PROJECT**

In pursuance of Sub-Section 7 of Section 31 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (XL of 1997); enclosed please find herewith '*Decision of the Authority in the matter of Motion for Leave for Review filed by Pakhtunkhwa Energy Development Organization (PEDO) for 40.8 MW Koto Hydropower Project*' for immediate publication in the official Gazette of Pakistan. Please also furnish thirty five (35) copies of the Notification to this Office after its publication.

Encl: Notification (14 Pages) & CD

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(Syed Safeer Hussain)