



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

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No. NEPRA/TRF-374/TPJPL-2017/2220-2222  
February 14, 2017

**Subject: Decision of the National Electric Power Regulatory Authority in the Matter of Application for Unconditional Acceptance of Upfront Tariff for Small Hydro Power Projects filed by Trident Power JB (Pvt.) Limited (TPJPL) for its 4.6 MW Ravi Hydropower Project at Lower Bari Doab Canal, Okara Cantt, Punjab**

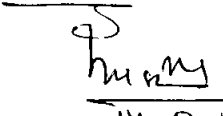
Dear Sir,

Please find enclosed herewith the subject Decision of the Authority along with Annex-I and Annex-II (15 pages) in Case No. NEPRA/TRF-374/TPJPL-2017.

2. The Decision is being intimated to the Federal Government for the purpose of notification in the official gazette pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997).

3. The Order at paragraph 6 of the Decision needs to be notified in the official Gazette.

Enclosure: As above

  
14.2.17  
( Syed Safer Hussain )

Secretary  
Ministry of Water & Power  
'A' Block, Pak Secretariat  
Islamabad

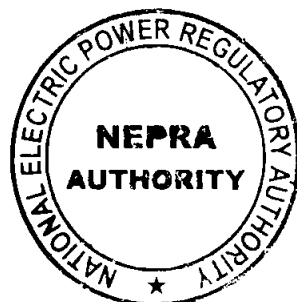
CC:

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



**DECISION OF THE NATIONAL ELECTRIC POWER REGULATORY  
AUTHORITY IN THE MATTER OF APPLICATION FOR UNCONDITIONAL  
ACCEPTANCE OF UPFRONT TARIFF FOR SMALL HYDRO POWER  
PROJECTS FILED BY TRIDENT POWER JB (PVT) LIMITED (TPJPL) FOR  
ITS 4.6 MW RAVI HYDROPOWER PROJECT AT LOWER BARI DOAB  
CANAL, OKARA CANTT., PUNJAB.**

1. The National Electric Power Regulatory Authority (hereinafter referred to as the "Authority") vide its determination dated April 02, 2015 had approved Upfront Tariff for Small Hydro Power Generation Projects up to 25 MW Installed Capacity (hereinafter referred to as the "Upfront Tariff"), which was reviewed through the Authority's subsequent decision in the matter of Motions for Leave for Review filed by Riali Hydro Power Company (Pvt.) Limited (RHPCL) and Kathai-II Hydro (Pvt.) Limited (KHL) dated October 14, 2015.
2. Trident Power JB (Pvt) Limited (hereinafter referred to as "TPJPL" or the "applicant" or the "company") on December 23, 2016 submitted an application for unconditional acceptance of the Upfront Tariff for its proposed hydropower project of 4.6 MW installed capacity Ravi Hydro Power project to be located at RD 260+000, Lower Bari Doab Canal, Okara Cantt., Punjab (hereinafter referred to as the "Project"). TPJPL also submitted an application dated May 11, 2016 for grant of Generation License for its Project.
3. The upfront tariff application was scrutinized and found to be in compliance with the Terms and Conditions stipulated in the aforementioned decisions of the Authority and the requirements prescribed in the National Electric Power Regulatory Authority Upfront Tariff (Approval & Procedure) Regulations, 2011. The Authority noted that the Punjab Power Development Board (PPDB) vide letter dated January, 2016 recommended the applicant for grant of upfront tariff. Moreover, the PPDB vide letter dated January 07, 2016 has provided the certificate of its panel of experts regarding net annual plant factor of the Project. As per the certificate of the panel of experts, the Project has a net head of 3.10 meters and is expected to deliver a net annual energy of 27.23 GWh to the grid at 75% plant factor. The applicant has certified that the net annual plant factor of the Project, as certified by the panel of experts of PPDB, is not based on detailed design, therefore, the applicant is directed to seek onetime adjustment based on revised net annual plant factor as per finalized detailed project design.



within 15 days of commercial operations date of the Project, accompanied by the panel of experts' revised certificate regarding annual plant factor. The applicant has certified that all plant and machinery to be installed will be brand new and the Project is a green field hydro power project. Further, the applicant has certified that it has not already executed a power purchase agreement or achieved financial close for the said Project. The applicant has sought upfront tariff based on 100% local loan. Furthermore, the applicant has opted not to bear hydrological risk, therefore the same will be transferred to the power purchaser. The reference monthly benchmark hydrology and benchmark deliverable energy figures of the Project are given hereunder:

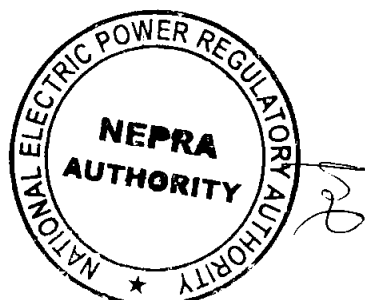
Reference monthly benchmark hydrology [m<sup>3</sup>/s]:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2.4	89.6	103.1	119.5	130	141.6	150.8	150.1	141.1	98.2	129.3	107.2	1362.9

Reference monthly benchmark deliverable energy figures [GWh]:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
0.05	1.65	2.1	2.35	2.65	2.79	3.07	3.06	2.78	2	2.55	2.18	27.23

4. The PPDB vide letter dated May, 2016 has informed that two (02) Nos. separate LOIs were issued to project sponsors for development of 2.5 MW HPP on LBDC at RD 285+454 and 03 MW at RD 258+654 dated 05.04.2013 and 12.04.2013 respectively, whereas during the conduct of feasibility study, the sponsor proposed to merge the two (02) sites into one (01) having capacity of 4.6 MW at RD 260+000 for making the Project more viable. The sponsor's proposal for merger of the two (02) sites was accepted by PPDB appointed POE and the feasibility study of the Project was approved by POE on 07.01.2016. The Authority furthermore noted that Lahore Electric Supply Company Limited (LESCO) vide its memo no. 57053-571 dated December 16, 2016 has issued its consent enabling Central Power Purchasing Agency (Guarantee) Limited (CPPA-G) to procure 4.6 MW power from the Project. The Authority hereby directs the Power Purchaser (i.e. either the CPPA-G or the DISCO) to ensure timely completion of interconnection facilities. The Power Purchaser is directed to follow NEPRA (Sale of Electric Power by Renewable Energy Companies) Guidelines, 2015 (SRO 53(I)/2015 dated 23 January 2015) in this respect. Further in this regard, the Authority has decided that any penalties/liquidated damages/non-project missed volumes, etc. by whatever name called, payable by





the power purchaser on account of its default in providing the interconnection facilities on the committed date, will not be allowed by the Authority to the power purchaser as a part of its tariff.

5. Considering the application along with other relevant information, documents and facts highlighted above, the Authority has decided to grant upfront tariff to TPJPL. The Authority hereby directs that the Energy/Power Purchase Agreement, agreed between TPJPL and the power purchaser, shall be submitted to the Authority for review.

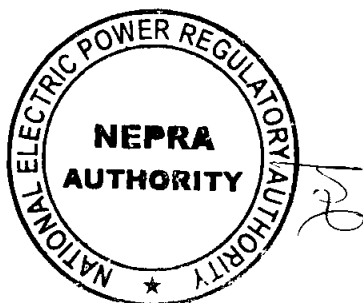
6. **ORDER**

Pursuant to section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 read with Rule 6 of the National Electric Power Regulatory Authority Licensing (Generation) Rules, 2000 and Regulation 4 (7) of the National Electric Power Regulatory Authority Upfront Tariff (Approval & Procedure) Regulations, 2011, Trident Power JB (Private) Limited (the “applicant” or “company”) is allowed to charge the following specified/approved tariff for electricity delivered to the power purchaser from its low head hydropower project:

**REFERENCE TARIFF ON BOOT BASIS**

	With 100% local debt	
	Years 1 to10 (Rs. /kWh)	Years 11 to 30 (Rs. /kWh)
<b>Energy Charge</b>		
Variable O & M		
- Local	0.1126	0.1126
- Foreign	0.1126	0.1126
<b>Capacity Charge</b>		
Fixed O & M		
- Local	0.5402	0.5402
- Foreign	0.1350	0.1350
Insurance	0.6795	0.6795
Return on equity	4.4968	4.5850
Debt servicing	7.9547	
Total tariff	14.0314	6.1650

Levelised tariff	
- Rs. /kWh	11.2924
- US cents/kwh.	11.0764



*[Handwritten signature]*



The reference component wise Upfront Tariff table is attached herewith as Annex - I. The reference Debt Service schedule is attached herewith as Annex - II.

Summary of indexations which may be applied on various tariff components is as follows:

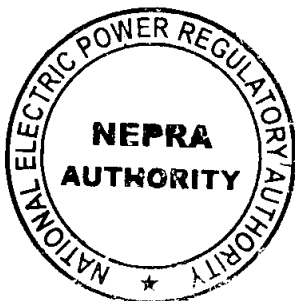
	<u>Indexation</u>
Variable O & M - Local - Foreign	CPI (General) US CPI and PKR/US\$
Fixed O & M - Local - Foreign	CPI (General) US CPI and PKR/US\$
Insurance	PKR/US \$ (if applicable)
Return on equity	PKR/US \$
Debt servicing - Principal - Interest	<u>Local debt</u> - 3 months KIBOR

i) Hydrological risk

The hydrological risk shall be borne by the power purchaser in accordance with the GOP Policy for Development of Renewable Energy for Power Generation, 2006.

ii) Adjustment on account of savings in cost of debt

The above tariff has been worked out on the basis of 3 months KIBOR of 6.73% plus a premium of 350 basis points. In case the spread negotiated is less than the said limits, the savings in the premium over KIBOR shall be shared by the power purchaser and the power producer in the ratio of 60 : 40 respectively. The power producer shall submit relevant authentic documentary evidence to the Authority, for the aforesaid adjustment within 15 days of commercial operations date of the project. In case the premium



*Q*



on KIBOR is higher than that mentioned above, no adjustment on the basis of actual higher premium will be allowed.

The interest during construction assumed for the purpose of tariff calculations is US\$ 0.502 Million per MW. The interest during construction will be reassessed at commercial operations date of the project with actual KIBOR and spread as detailed above.

iii) **Adjustment on account of Sinasure fees**

Since the project is 100% locally financed, adjustment in project cost on account of Sinasure or other export credit insurance fees is not applicable in this case.

iv) **Adjustment on account of actual plant factor**

The above tariff has been adjusted based on 75% plant factor of the project.

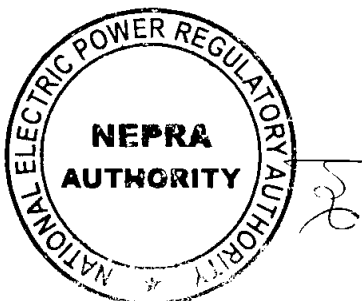
The upfront tariff has been opted without finalization of detailed project design, therefore the power producer shall submit request for onetime adjustment, within 15 days of the commercial operations date of the project, accompanied by the revised panel of experts certificate regarding net annual plant factor, on the basis of detailed project design. Other terms and conditions of the upfront tariff, including for installed capacity and net annual plant factor will remain applicable.

v) **Adjustment for loan structure**

The above tariff has been allowed on the basis of loan structure proposed by the company, i.e. 100% local debt. The tariff will not be subject to any further change, regardless of any subsequent change(s) in the financing structure, etc., except for the adjustment in accordance with the onetime adjustment mechanism detailed herein, where applicable, and the application of relevant indexations/adjustment as detailed in this order.

vi) **Pass-Through Items**

If the company is obligated to pay any tax on its income from generation of electricity from small hydro, or water use charges/IRSA charges/other such levies or charges, not being of refundable nature, are payable by the company for generation of electricity from small hydro or any duties and/or taxes, not being of refundable nature, are imposed on the company upto the commencement of its commercial operations for import of its plant





machinery and equipment, the exact amount paid by the company on these accounts shall be reimbursed by the power purchaser on production of original receipts. This payment should be considered as a pass-through payment spread over a twelve months period. The payment on account of water use charges shall be spread equally over 12 months for each year. Furthermore, in such a scenario, the company shall also submit to the power purchaser details of any tax/levies/charges savings and the power purchaser shall deduct the amount of these savings from its payment to the company on account of taxation.

The adjustment for duties and/or taxes will be restricted only to the extent of duties and/or taxes directly imposed on the company. No adjustment for duties and/or taxes imposed on third parties such as contractors, suppliers, consultants, etc., will be allowed. Further, withholding tax on dividend will also not be allowed as a pass through item.

vii) Onetime adjustment of Tariff after COD

Total EPC costs of US\$ 3.211 Million / MW will be assumed for the purpose of Onetime adjustment of Tariff.

40% of the assumed EPC cost will be adjusted over 36 months (maximum) starting from the date of financial close of the project for USD/PKR exchange rate variation.

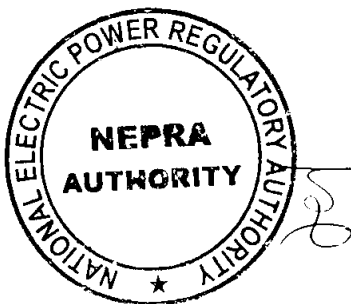
60% of the assumed EPC cost converted at reference USD/PKR exchange rate of 101.95 will be adjusted over 36 months (maximum) starting from the date of financial close of the project according to the formula below:

$$P_n = 0.51 + 0.10*(C_n/C_o) + 0.09*(S_n/S_o) + 0.15*(F_n/F_o) + 0.15*(L_n/L_o)$$

Where;

$P_n$  is the adjustment factor to be applied for civil works;

$C_n$  is the index value for the relevant month for Cement as given in the Monthly Bulletin of Statistics published by the Pakistan Bureau of Statistics;





Sn is the index value for the relevant month for Steel Bar & Sheets as given in the Monthly Bulletin of Statistics published by the Pakistan Bureau of Statistics;

Fn is the index value for the relevant month for Diesel Oil as given in the Monthly Bulletin of Statistics published by the Pakistan Bureau of Statistics;

Ln is the index value for the relevant month for Mason (Raj) for Rawalpindi as per the Wage Rates published in the Monthly Bulletin of Statistics published by the Pakistan Bureau of Statistics;

Co, So, Fo and Lo are the reference values of the price indices for Cement, Steel Bar & Sheets, Diesel Oil and Mason (Raj) respectively as available at the time of financial close of the project.

The adjustments will be made on quarterly basis and where applicable, the amounts will be spread equally into quarters after considering the annual phasing allowed by the Authority in its upfront tariff determination.

All other project costs, excluding Interest During Construction will be considered as local costs and shall not be adjusted in any way.

Interest During Construction will be adjusted based on the combined impact of the allowed financing mix and One-Time adjustment of EPC cost.

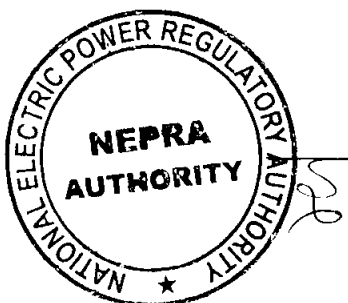
**viii) Indexations/adjustment**

The tariff allowed to the company, after onetime adjustment, will remain unchanged throughout the tariff control period, except for the adjustments due to indexations/adjustment detailed in this order. The indexations of O & M, return on equity, principal repayment of debt and interest will be allowed on quarterly basis on 1<sup>st</sup> July, 1<sup>st</sup> October, 1<sup>st</sup> January and 1<sup>st</sup> April. Insurance component will be adjusted annually.

The mode of indexations/adjustment will be as under:

a) Indexations applicable to O & M:

$$\text{VOM (LREV)} = \text{VOM (LREF)} * \text{CPI-G (REV)} / \text{CPI-G (REF)}$$







$$VOM_{(FREV)} = VOM_{(FREF)} * US\ CPI_{(REV)} / US\ CPI_{(REF)} * ER_{(REV)} / ER_{(REF)}$$

$$FOM_{(LREV)} = FOM_{(LREF)} * CPI-G_{(REV)} / CPI-G_{(REF)}$$

$$FOM_{(FREV)} = FOM_{(FREF)} * US\ CPI_{(REV)} / US\ CPI_{(REF)} * ER_{(REV)} / ER_{(REF)}$$

Where:

$VOM_{(LREV)}$  = The revised applicable variable O & M local component of tariff

$VOM_{(FREV)}$  = The revised applicable variable O & M foreign component of tariff

$FOM_{(LREV)}$  = The revised applicable fixed O & M local component of tariff

$FOM_{(FREV)}$  = The revised applicable fixed O & M foreign component of tariff

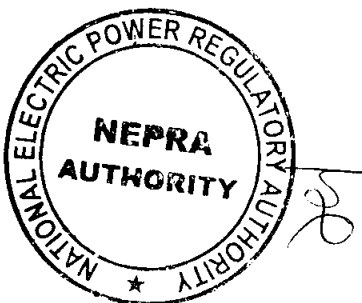
$VOM_{(LREF)}$  = The reference variable O & M local component of tariff for the relevant period

$VOM_{(FREF)}$  = The reference variable O & M foreign component of tariff for the relevant period

$FOM_{(LREF)}$  = The reference fixed O & M local component of tariff for the relevant period

$FOM_{(FREF)}$  = The reference fixed O & M foreign component of tariff for the relevant period

$CPI-G_{(REV)}$  = The revised Consumer Price Index (General) based on latest available information with respect to Consumer Price Index (General) as notified by the Pakistan Bureau of Statistics



US CPI<sub>(REV)</sub> = The revised US CPI (all urban consumers) based on latest available information with respect to US CPI (notified by US Bureau of Labor Statistics)

ER<sub>(REV)</sub> = Revised TT & OD selling rate of US Dollar as notified by the National Bank of Pakistan as at the last day of the preceding quarter

CPI-G<sub>(REF)</sub> = Reference Consumer Price Index (General) - Current reference 199.66 Consumer Price Index (General) for the month of May 2015 as notified by the Pakistan Bureau of Statistics

US CPI<sub>(REF)</sub> = Reference US CPI (all urban consumers) - Current reference 237.805 US CPI (all urban consumers) for the month of May 2015 as notified by the US Bureau of Labor Statistics

ER<sub>(REF)</sub> = Reference TT & OD selling rate of US dollar - current reference 101.95

b) Adjustment of insurance component

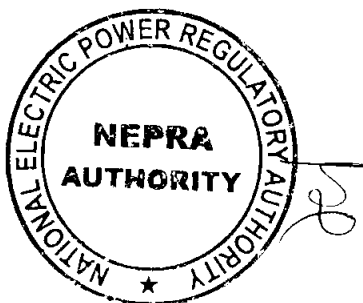
In case of insurance denominated in US \$, insurance cost component of tariff will be adjusted only on account of US \$/PKR exchange rate variation annually, not exceeding the insurance cost actually incurred. For availing this adjustment, the company will have to substantiate through authentic documentary evidence that the insurance cost allowed to it (from COD to date) does not exceed the insurance cost actually incurred.

c) Indexations applicable to return on equity

$$ROE_{(REV)} = ROE_{(REF)} * ER_{(REV)} / ER_{(REF)}$$

Where:

ROE<sub>(REV)</sub> = The revised applicable return on equity tariff component indexed with exchange rate parity





- $ROE_{(REF)}$  = The reference return on equity tariff component for the relevant period
- $ER_{(REV)}$  = Revised TT & OD selling rate of US Dollar as notified by the National Bank of Pakistan as at the last day of the preceding quarter
- $ER_{(REF)}$  = Reference TT & OD selling rate of US dollar – current reference 101.95

d) Indexation applicable to interest on local debt

$$\Delta I = P_{(REV)} * (KIBOR_{(REV)} - 6.73\%) / 4$$

Where:

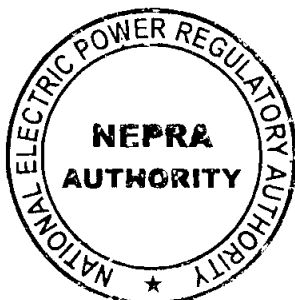
$\Delta I$  = The variation in interest charges applicable corresponding to variation in 3 months KIBOR.  $\Delta I$  can be positive or negative depending upon whether 3 months KIBOR<sub>(REV)</sub> per annum > or < 6.73%. The interest payment obligation will be enhanced or reduced to the extent of  $\Delta I$  for each quarter under adjustment.

$P_{(REV)}$  = is the revised outstanding principal (as indicated in the attached debt service schedule to this order at Annex-II), after allowing onetime adjustment for exchange rate parity, on a quarterly basis at the relevant quarterly calculations date. Quarter 1 shall commence on the commercial operations date (i.e. the first figure will be used for calculation purposes of interest for the first quarter after COD).

$KIBOR_{(REV)}$  = Revised 3 months KIBOR as at the last day of the preceding quarter

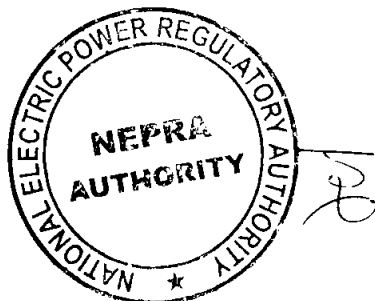
Note:

Above described indexations/adjustment will be approved and announced by the Authority within fifteen days of the company's request for indexations/adjustment in tariff in accordance with the requisite mechanisms stipulated herein.



**Terms and Conditions of Upfront Tariff:**

- ix) This tariff is only applicable if the installed capacity of the project is in the range of 1 MW to 25 MW.
- x) The plant and machinery of the project, will be certified as new and of international standard by an independent engineer, appointed in accordance with the terms of power purchase agreement before any payment under this tariff is made. The said certificate shall be obtained and retained by the power purchaser.
- xi) The approved tariff will no longer remain applicable/valid if, financial close is not achieved for the project within 18 months from the date of this decision, or if the generation license is declined to the company/project.
- xii) The targeted maximum construction period after financial close is 36 months. No adjustment will be allowed in this tariff to account for financial impact of any delay in project construction. However, the failure of the project to complete construction within 36 months of financial close will not invalidate the tariff granted.
- xiii) The decision to opt for upfront tariff is irrevocable.
- xiv) In the above tariff no adjustment for certified emission reductions has been accounted for. However, if the company chooses to register for carbon credits, the subsequent proceeds from trading of carbon credits, shall be distributed between the power purchaser and the power producer in accordance with the Policy for Development of Renewable Energy for Power Generation 2006, as amended from time to time.
- xv) This tariff will be applicable for a period of thirty years (30) from the commencement of commercial operations.
- xvi) The terms and conditions specified herein form an integral part of this tariff.



**xvii) Design & Manufacturing Standards:**

Small hydro power generation system shall be designed, manufactured and tested in accordance with the latest ASME, ANSI, IEC standards or other equivalent standards. All plant and equipment shall be new.

**xviii) Power curve of the hydro power complex:**

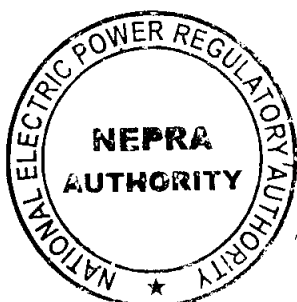
The power curve of the hydro power plant shall be verified by the power purchaser, as part of the commissioning tests, according to the latest IEC standards and shall be used to measure the performance of the hydro generating units.

**xix) Emissions Trading/ Carbon Credits:**

The company shall process and obtain emissions/carbon credits expeditiously (if applicable to the project) and the proceeds shall be distributed between the parties in accordance with the Policy for Development of Renewable Energy for Power Generation 2006, as amended from time to time.

**xx) General:**

- The power purchaser, before signing the Power Purchase Agreement, shall satisfy itself that the plant and machinery proposed to be installed is new and is of an acceptable quality.
- The project will be transferred, at the end of tariff control period of 30 years, to the power purchaser/relevant Government at a notional price of Rs. 1.
- The Power Purchase Agreement should stipulate terms and conditions, regarding periodic physical inspection of plant and machinery, ensuring that the power plant of the company allowed this tariff is properly maintained and continues to supply energy for the entire tariff control period of 30 years.
- Pre COD sale of electricity is allowed to the power producer, subject to the terms and conditions of Power Purchase Agreement, 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 Power Purchase Agreement in any manner.





- General assumptions, which are not covered in this determination and National Electric Power Regulatory Authority Upfront Tariff (Approval & Procedure) Regulations, 2011, may be dealt with as per the standard terms of the Power Purchase Agreement.
7. The EPA/PPA executed shall be consistent with all applicable documents including Generation License and NEPRA's Tariff determination for the power producer. Any provision of PPA/EPA which is inconsistent with NEPRA's Tariff Determination shall be void to that extent and its financial impact shall not be passed on to the end consumer.
8. The order at paragraph 6 is recommended for notification by the Federal Government in the official gazette in accordance with Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.

**AUTHORITY**

(Himayat Ullah Khan)  
Member

(Syed Mazood ul Hassan Naqvi)  
Member

(Major (Rtd) Haroon Rashid)  
Member

(Tariq Saddozai)  
Chairman



14.02.17

**UPFRONT TARIFF FOR TRIDENT POWER JB (PVT) LIMITED 4.6 MW LOW HEAD HYDROPOWER PROJECT  
REFERENCE TARIFF**

Year	Energy Purchase Price		Capacity Purchase Price							Total Tariff
	Variable O&M Local	Variable O&M Foreign	Fixed O&M Local	Fixed O&M Foreign	Insurance	Return on Equity (ROE)	Principal Repayment	Interest		
	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kWh		
1	0.1126	0.1126	0.5402	0.1350	0.6795	4.4968	3.0099	4.9448	14.0314	
2	0.1126	0.1126	0.5402	0.1350	0.6795	4.4968	3.3298	4.6249	14.0314	
3	0.1126	0.1126	0.5402	0.1350	0.6795	4.4968	3.6838	4.2710	14.0314	
4	0.1126	0.1126	0.5402	0.1350	0.6795	4.4968	4.0753	3.8794	14.0314	
5	0.1126	0.1126	0.5402	0.1350	0.6795	4.4968	4.5085	3.4462	14.0314	
6	0.1126	0.1126	0.5402	0.1350	0.6795	4.4968	4.9877	2.9670	14.0314	
7	0.1126	0.1126	0.5402	0.1350	0.6795	4.4968	5.5179	2.4369	14.0314	
8	0.1126	0.1126	0.5402	0.1350	0.6795	4.4968	6.1044	1.8504	14.0314	
9	0.1126	0.1126	0.5402	0.1350	0.6795	4.4968	6.7532	1.2015	14.0314	
10	0.1126	0.1126	0.5402	0.1350	0.6795	4.4968	7.4710	0.4837	14.0314	
11	0.1126	0.1126	0.5402	0.1350	0.6795	4.5850	-	-	6.1650	
12	0.1126	0.1126	0.5402	0.1350	0.6795	4.5850	-	-	6.1650	
13	0.1126	0.1126	0.5402	0.1350	0.6795	4.5850	-	-	6.1650	
14	0.1126	0.1126	0.5402	0.1350	0.6795	4.5850	-	-	6.1650	
15	0.1126	0.1126	0.5402	0.1350	0.6795	4.5850	-	-	6.1650	
16	0.1126	0.1126	0.5402	0.1350	0.6795	4.5850	-	-	6.1650	
17	0.1126	0.1126	0.5402	0.1350	0.6795	4.5850	-	-	6.1650	
18	0.1126	0.1126	0.5402	0.1350	0.6795	4.5850	-	-	6.1650	
19	0.1126	0.1126	0.5402	0.1350	0.6795	4.5850	-	-	6.1650	
20	0.1126	0.1126	0.5402	0.1350	0.6795	4.5850	-	-	6.1650	
21	0.1126	0.1126	0.5402	0.1350	0.6795	4.5850	-	-	6.1650	
22	0.1126	0.1126	0.5402	0.1350	0.6795	4.5850	-	-	6.1650	
23	0.1126	0.1126	0.5402	0.1350	0.6795	4.5850	-	-	6.1650	
24	0.1126	0.1126	0.5402	0.1350	0.6795	4.5850	-	-	6.1650	
25	0.1126	0.1126	0.5402	0.1350	0.6795	4.5850	-	-	6.1650	
26	0.1126	0.1126	0.5402	0.1350	0.6795	4.5850	-	-	6.1650	
27	0.1126	0.1126	0.5402	0.1350	0.6795	4.5850	-	-	6.1650	
28	0.1126	0.1126	0.5402	0.1350	0.6795	4.5850	-	-	6.1650	
29	0.1126	0.1126	0.5402	0.1350	0.6795	4.5850	-	-	6.1650	
30	0.1126	0.1126	0.5402	0.1350	0.6795	4.5850	-	-	6.1650	
<b>Levelized Tariff</b>	<b>0.1126</b>	<b>0.1126</b>	<b>0.5402</b>	<b>0.1350</b>	<b>0.6795</b>	<b>4.5275</b>	<b>2.9785</b>	<b>2.2065</b>	<b>11.2924</b>	



**UPFRONT TARIFF FOR TRIDENT POWER JB (PVT) LIMITED 4.6 MW LOW HEAD HYDROPOWER PROJECT**

**Debt Servicing Schedule for the Purpose of Indexation of Debt Component Only**

Period	100% Local Debt					Annual Principal Repayment Rs./kWh	Annual Interest Rs./kWh	Annual Debt Servicing Rs./kWh
	Principal Million Rs.	Repayment Million Rs.	Mark-Up Million Rs.	Balance Million Rs.	Debt Service Million Rs.			
	321.58	4.71	8.22	316.87	12.93			
	316.87	4.83	8.10	312.04	12.93			
	312.04	4.95	7.98	307.09	12.93			
	307.09	5.08	7.85	302.01	12.93			
1	321.58	19.58	32.16	302.01	51.74	3.0099	4.9448	7.9547
	302.01	5.21	7.72	296.79	12.93			
	296.79	5.34	7.59	291.45	12.93			
	291.45	5.48	7.45	285.97	12.93			
	285.97	5.62	7.31	280.35	12.93			
2	302.01	21.66	30.08	280.35	51.74	3.3298	4.6249	7.9547
	280.35	5.77	7.17	274.58	12.93			
	274.58	5.91	7.02	268.67	12.93			
	268.67	6.06	6.87	262.61	12.93			
	262.61	6.22	6.72	256.39	12.93			
3	280.35	23.96	27.78	256.39	51.74	3.6838	4.2710	7.9547
	256.39	6.38	6.56	250.01	12.93			
	250.01	6.54	6.39	243.47	12.93			
	243.47	6.71	6.23	236.76	12.93			
	236.76	6.88	6.06	229.88	12.93			
4	256.39	26.51	25.23	229.88	51.74	4.0753	3.8794	7.9547
	229.88	7.06	5.88	222.82	12.93			
	222.82	7.24	5.70	215.59	12.93			
	215.59	7.42	5.51	208.17	12.93			
	208.17	7.61	5.32	200.55	12.93			
5	229.88	29.32	22.42	200.55	51.74	4.5085	3.4462	7.9547
	200.55	7.81	5.13	192.75	12.93			
	192.75	8.01	4.93	184.74	12.93			
	184.74	8.21	4.72	176.53	12.93			
	176.53	8.42	4.51	168.11	12.93			
6	200.55	32.44	19.30	168.11	51.74	4.9877	2.9670	7.9547
	168.11	8.64	4.30	159.48	12.93			
	159.48	8.86	4.08	150.62	12.93			
	150.62	9.08	3.85	141.54	12.93			
	141.54	9.32	3.62	132.22	12.93			
7	168.11	35.89	15.85	132.22	51.74	5.5179	2.4369	7.9547
	132.22	9.55	3.38	122.67	12.93			
	122.67	9.80	3.14	112.87	12.93			
	112.87	10.05	2.89	102.82	12.93			
	102.82	10.31	2.63	92.52	12.93			
8	132.22	39.70	12.04	92.52	51.74	6.1044	1.8504	7.9547
	92.52	10.57	2.37	81.95	12.93			
	81.95	10.84	2.10	71.11	12.93			
	71.11	11.12	1.82	59.99	12.93			
	59.99	11.40	1.53	48.59	12.93			
9	92.52	43.92	7.82	48.59	51.74	6.7532	1.2015	7.9547
	48.59	11.69	1.24	36.90	12.93			
	36.90	11.99	0.94	24.91	12.93			
	24.91	12.30	0.64	12.61	12.93			
	12.61	12.61	0.32	0.00	12.93			
10	48.59	48.59	3.15	0.00	51.74	7.4710	0.4837	7.9547

