



**Registrar**

# **National Electric Power Regulatory Authority**

## **Islamic Republic of Pakistan**

NEPRA Tower, Attaturk Avenue (East), G-5/1, Islamabad  
Ph: +92-51-9206500, Fax: +92-51-2600026  
Web: [www.nepra.org.pk](http://www.nepra.org.pk), E-mail: [registrar@nepra.org.pk](mailto:registrar@nepra.org.pk)

No. NEPRA/TRF-327/HEPL-2015/11826-11828  
August 10, 2015

**Subject: Decision of National Electric Power Regulatory Authority in the matter of Application of Hawa Energy (Private) Ltd. Opting for Upfront Tariff for Wind Power Projects [Case No. NEPRA/TRF-327/HEPL-2015]**

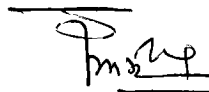
Dear Sir,

Please find enclosed herewith the subject Decision of the Authority along with Annexure-I (09 pages) in Case No. NEPRA/TRF-327/HEPL-2015.

2. The Decision is being intimated to the Federal Government for the purpose of notification of the approved tariff 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. Please note that Order of the Authority at para 4 of the Decision along with Annexure-I needs to be notified in the official Gazette.

Enclosure: As above

  
( Syed Safeer Hussain )  
10.08.15

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

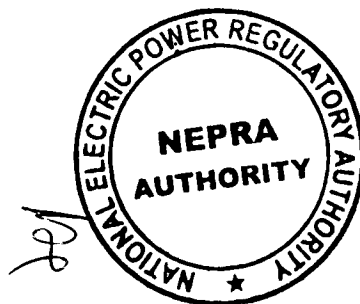
CC:

1. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad.
2. Secretary, Ministry of Finance, Islamabad.

DECISION OF NATIONAL ELECTRIC POWER REGULATORY AUTHORITY IN THE MATTER OF APPLICATION  
OF HAWA ENERGY (PRIVATE) LIMITED OPTING FOR UPFRONT TARIFF FOR WIND POWER PROJECTS

1. Hawa Energy Private Limited (hereinafter referred to as "HEPL") on July 02, 2015 submitted application for unconditional acceptance (hereinafter referred to as "application") of upfront tariff for wind power generation projects determined by the National Electric Power Regulatory Authority (hereinafter referred to as the "Authority") vide its determination dated June 24, 2015 (hereinafter referred to as the "upfront tariff 2015"), with all the terms, conditions and assumptions provided therein, for its proposed wind power generation project of 50 MW installed capacity to be located at Jhimpir, District Thatta, Sindh.
2. The Authority noted that HEPL previously opted for wind upfront tariff determined by the Authority on April 24, 2013 (hereinafter referred to as upfront tariff, 2013). HEPL was awarded upfront tariff, 2013 vide Authority decision No. NEPRA/TRF-268/HEPL-2013/6676-6678 on June 20, 2014 based on 100% foreign financing. HEPL, however, could not achieve financial close as per the timeline thereof specified by the Authority. For that purpose, HEPL filed a motion for leave for review on April 03, 2015 requesting the Authority to extend the financial close timeline. After considering the grounds submitted by HEPL for the requested extension in financial close, the Authority decided not to accede therewith and issued its decision on June 29, 2015 ("review decision"). At para 10 (ix) of review decision, the Authority also stated that a new upfront tariff for wind power generation has been determined by NEPRA which can be opted by HEPL as it has already fulfilled the requirements of NEPRA Upfront Tariff (Approval & Procedure) Regulations, 2011 for grant of upfront tariff, therefore, it is eligible and can apply for grant of new upfront tariff for wind power generation in the prescribed manner.
3. HEPL's application was processed in accordance with the relevant provisions of NEPRA Upfront Tariff (Approval and Procedure) Regulations, 2011 and upfront tariff 2015. Considering the application along with other relevant information and documents, the Authority has decided to grant upfront tariff, 2015 to HEPL. The Authority hereby directs that the Energy Purchase Agreement, agreed between HEPL and the power purchaser, shall be submitted to the Authority for review.

*[Handwritten signature]*



**ORDER**

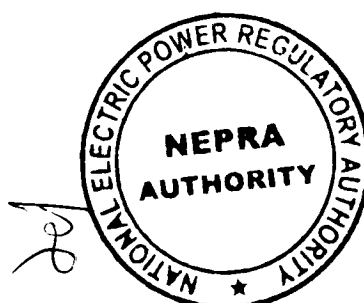
4. Pursuant to section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 read with Rule 6 of the National Electric Power Regulatory Authority Licensing (Generation) Rules, 2000 and Regulation 4 (7) of the National Electric Power Regulatory Authority Upfront Tariff (Approval & Procedure) Regulations, 2011, HEPL (the applicant) is allowed to charge the following specified/approved tariff for delivery of electricity to the power purchaser;

**REFERENCE TARIFF ON BOO BASIS**

Years	O & M	Insurance	Return on equity	Principal repayment of debt	Interest	Total tariff
1	1.5039	0.6349	3.6070	4.2656	2.4669	12.4782
2	1.5039	0.6349	3.6070	4.4727	2.2597	12.4782
3	1.5039	0.6349	3.6070	4.6900	2.0425	12.4782
4	1.5039	0.6349	3.6070	4.9177	1.8147	12.4782
5	1.5039	0.6349	3.6070	5.1566	1.5759	12.4782
6	1.5039	0.6349	3.6070	5.4070	1.3255	12.4782
7	1.5039	0.6349	3.6070	5.6696	1.0629	12.4782
8	1.5039	0.6349	3.6070	5.9450	0.7875	12.4782
9	1.5039	0.6349	3.6070	6.2337	0.4988	12.4782
10	1.5039	0.6349	3.6070	6.5364	0.1960	12.4782
11 to 20	1.5039	0.6349	3.6070	-	-	5.7458
Levelized - Rs./kWh.						10.6048
Indexation	PKR/US \$ & US CPI	PKR/US \$	PKR/US \$	PKR/US \$	PKR/US \$ & LIBOR	

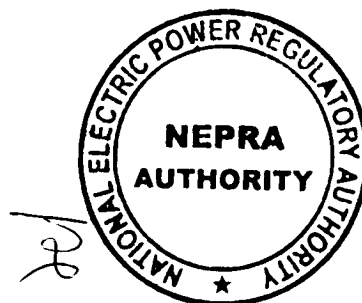
Levelized tariff discounted at 10% per annum works out to US cents 10.4481/kWh.

- i) This tariff is applicable for wind power generation only.
- ii) This tariff will be limited to the extent of net annual energy generation supplied to the power purchaser up to 35% net annual plant capacity factor. Net annual energy generation supplied to the power purchaser in a year, in excess of 35% net annual plant capacity factor will be charged at the following tariffs:



<b><u>Net annual plant capacity factor</u></b>	<b><u>% of the prevalent tariff</u></b>
Above 35% to 36%	75%
Above 36% to 37%	80%
Above 37%	100%

- iii) The power purchaser will not take the wind risk; the applicant will be required to account for this risk.
- iv) The plant and machinery of the applicant, will be certified as new and of international standard by an independent engineer, appointed in accordance with the terms of energy purchase agreement before any payment under this tariff is made. The said certificate shall be obtained and retained by the power purchaser.
- v) The applicant will have to achieve financial close within one year from the date of decision of the Authority awarding upfront tariff to it. The upfront tariff granted to the applicant will no longer remain applicable/valid, if financial close is not achieved by the applicant in the abovementioned timeline or a generation license is declined to the applicant.
- vi) The decision to opt for upfront tariff is irrevocable.
- vii) In the tabulated above tariff no adjustment for certified emission reductions has been accounted for. However, upon actual realization of carbon credits, the same shall be distributed between the power purchaser and the applicant in accordance with the applicable GOP Policy for Development of Renewable Energy for Power Generation, 2006, as amended from time to time.
- viii) The targeted maximum construction period after financial close is 18 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 applicant to complete construction within 18 months of financial close will not invalidate the tariff granted to it.
- ix) This tariff will be applicable for a period of twenty (20) years from the commencement of commercial operations.
- x) The terms and conditions specified herein form an integral part of this tariff.
- xi) This tariff has been worked out on the basis of information provided by the applicant regarding its loan structure i.e. 100% foreign loan and will not be subject to any further change, regardless of any subsequent change(s) in the financing structure, etc., except for the application of relevant indexations/adjustments as detailed below in this order.



xii) Adjustment on account of savings in cost of debt

This upfront tariff has been worked out on the basis of 3 months LIBOR of 0.2706% plus a premium of 450 basis points. In case negotiated spread is less than the said limits, the savings in the spread over LIBOR shall be shared by the power purchaser and the applicant in the ratio of 60:40 respectively. The applicant shall submit relevant authentic documentary evidence to the Authority, for the aforesaid adjustment within 15 days of commercial operations date. In case the premium on LIBOR is higher than that mentioned above, no adjustment on the basis of actual higher premium will be allowed.

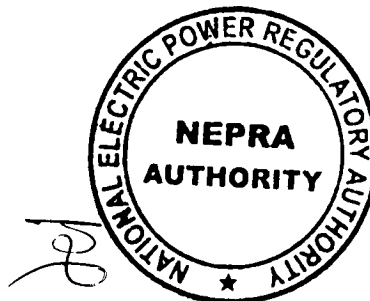
xiii) Adjustment on account of variations in LIBOR/KIBOR

The Authority has assessed interest during construction of USD 0.080 million per MW. The interest during construction will be reassessed after commercial operations date for the allowed construction period of eighteen months, starting from the date of financial close of the applicant, on the same computation basis as already adopted, by applying 3 months LIBOR of last day of the preceding quarter (plus allowed spread thereon), on the basis of phasing for debt injection considered in the computation of upfront tariff. The applicant shall submit relevant authentic documentary evidence to the Authority, for the aforesaid adjustment within fifteen days of the commercial operations date.

xiv) Pass-through items

If the applicant is obligated to pay any tax on its income from generation of electricity from wind, or any duties and/or taxes, not being of refundable nature, are imposed on the applicant up to the commencement of its commercial operations for import of its plant, machinery and equipment, the exact amount paid by the applicant 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. Furthermore, in such a scenario, the applicant shall also submit to the power purchaser details of any tax savings and the power purchaser shall deduct the amount of these savings from its payment to the applicant 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 applicant. 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.



xv) Indexations/adjustment

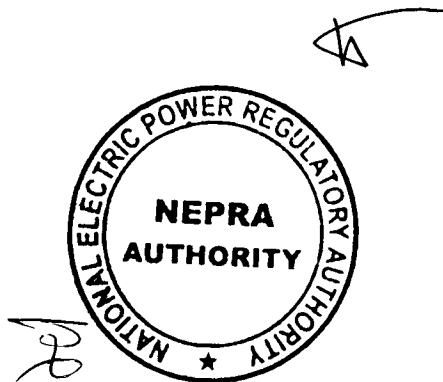
The tariff allowed to applicant, will remain unchanged throughout the tariff control period, except for the adjustments due to indexations/adjustment detailed in this order. The indexations of O & M, return on equity, principal repayment of debt and interest will be allowed on quarterly basis on 1<sup>st</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 mechanism of indexations/adjustment will be as under:

a) Indexations applicable to O & M:

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

Where:

$OM_{(FREV)}$	=	The revised applicable O&M tariff component indexed with US CPI and exchange rate parity
$OM_{(FREF)}$	=	The reference O&M tariff component for the relevant period
$US\ CPI_{(REV)}$	=	The revised US CPI (all urban consumers) based on latest available information with respect to US CPI (notified by US Bureau of Labor Statistics)
$US\ CPI_{(REF)}$	=	Reference US CPI (all urban consumers)-current reference 233.707 US CPI (all urban consumers) for the month of January, 2015 as notified by the US Bureau of Labor Statistics
$ER_{(REV)}$	=	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 101.50



b) Adjustment of insurance component

The actual insurance cost for the minimum cover required under contractual obligations with the power purchaser not exceeding 1% of Rs. 194.67 million per MW (US \$ 1.9179 million per MW) will be treated as pass-through. Insurance component of reference tariff shall be adjusted annually as per actual, upon production of authentic documentary evidence by the applicant, according to the following formula:

AIC	=	$\text{Ins}_{(\text{Ref})} / P_{(\text{Ref})} * P_{(\text{Act})}$
Where		
AIC	=	Adjusted insurance component of tariff
$\text{Ins}_{(\text{Ref})}$	=	Reference insurance component of tariff
$P_{(\text{Ref})}$	=	Reference premium @ 1% of Rs.194.67 million
$P_{(\text{Act})}$	=	Actual premium per MW of installed capacity or 1% of US \$ 1.9179 million converted into Pak Rupees on exchange rate prevailing on the 1 <sup>st</sup> day of the insurance coverage period, whichever is lower

c) Indexations applicable to return on equity

$$\text{ROE}_{(\text{FREV})} = \text{ROE}_{(\text{FREF})} * \text{ER}_{(\text{REV})} / \text{ER}_{(\text{REF})}$$

Where:

$\text{ROE}_{(\text{FREV})}$  = The revised applicable return on equity tariff component indexed with exchange rate parity

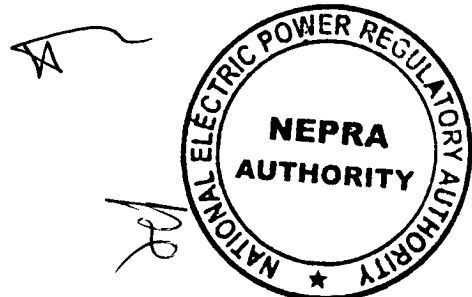
$\text{ROE}_{(\text{FREF})}$  = The reference return on equity tariff component for the relevant period

$\text{ER}_{(\text{REV})}$  = 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

$\text{ER}_{(\text{REF})}$  = Reference TT & OD selling rate of US dollar – current reference 101.50

d) Indexations applicable to debt

Foreign debt and its interest will be adjusted on quarterly basis, on account of 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, over the applicable reference exchange rate.



e) Indexations applicable to interest after achieving COD

$$\Delta I = P_{(REV)} * (LIBOR_{(REV)} - 0.2706\%) / 4$$

Where:

$\Delta I$  = The variation in interest charges applicable corresponding to variation in 3 months LIBOR.  $\Delta I$  can be positive or negative depending upon whether 3 months LIBOR<sub>(REV)</sub> per annum > or < 0.2706%. The interest payment obligation will be enhanced or reduced to the extent of  $\Delta I$  for each quarter under adjustment.

$P_{(REV)}$  = is the outstanding principal (as indicated in the attached debt service schedule to this order at Annex I), 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 the purposes of calculation of interest for the first quarter after commercial operations date).

$LIBOR_{(REV)}$  = Revised 3 months LIBOR rate as at the last day of the preceding quarter

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

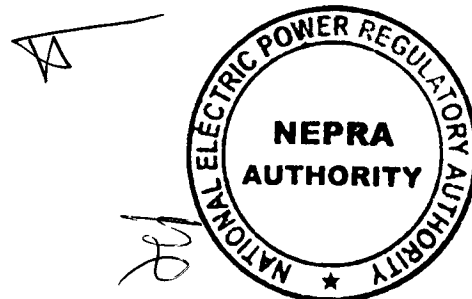
xvi) Other Terms and Conditions of Tariff:

a. Design & Manufacturing Standards:

Wind turbine generation system shall be designed, manufactured and tested in accordance with the latest IEC standards or other equivalent standards. All plant and equipment shall be new.

b. Emissions Trading/Carbon Credits:

The applicant shall process and obtain emissions/carbon credits expeditiously and credit the proceeds to the power purchaser in accordance with the applicable GOP Policy for Development of Renewable Energy for Power Generation, 2006, as amended from time to time.





c. General:

- The power purchaser before signing the Energy Purchase Agreement shall satisfy itself that the plant and machinery proposed to be installed is of a quality acceptable to it.
- Pre COD sale of electricity is allowed to the applicant, subject to the terms and conditions of Energy 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 Energy Purchase Agreement in any manner.
- General assumptions, which are not covered in this decision, determination of the Authority in the matter of upfront tariff for wind power generation dated June 24, 2015 and National Electric Power Regulatory Authority Upfront Tariff (Approval & Procedure) Regulations, 2011, may be dealt with as per the standard terms of the Energy Purchase Agreement.

5. The order at paragraph 4 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.

on leave.

(Khawaja Muhammad Naeem)  
Member

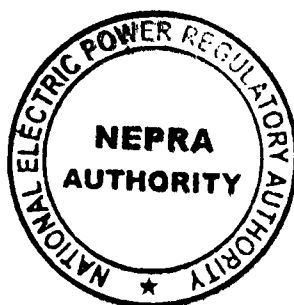
AUTHORITY

Himayat Ullah Khan  
10.8.15  
(Himayat Ullah Khan)  
Member

(Syed Masood ul Hassan Naqvi)  
10/8/15  
Member

(Maj. (R) Haroon Rashid)  
10/8/15  
Member

(Brig. (R) Tariq Saddozai)  
10/8/15  
Chairman



**Hawa Energy (Private) Limited**  
**Debt Servicing Schedule**

Relevant Quarters	Base amount ( USD)	Principal Repayment (USD)	Interest (USD)	Balance Principal (USD)	Annual Principal Repayment Rs./kWh	Annual Interest Rs./kWh
1	80,492,732	1,582,094	959,997	78,910,638	4.2656	2.4669
2	78,910,638	1,600,963	941,128	77,309,676		
3	77,309,676	1,620,056	922,034	75,689,619		
4	75,689,619	1,639,378	902,712	74,050,241		
5	74,050,241	1,658,930	883,160	72,391,311	4.4727	2.2597
6	72,391,311	1,678,715	863,375	70,712,596		
7	70,712,596	1,698,736	843,354	69,013,860		
8	69,013,860	1,718,996	823,094	67,294,863		
9	67,294,863	1,739,498	802,592	65,555,365	4.6900	2.0425
10	65,555,365	1,760,244	781,846	63,795,121		
11	63,795,121	1,781,238	760,853	62,013,883		
12	62,013,883	1,802,482	739,609	60,211,401		
13	60,211,401	1,823,979	718,111	58,387,422	4.9177	1.8147
14	58,387,422	1,845,733	696,358	56,541,690		
15	56,541,690	1,867,746	674,344	54,673,944		
16	54,673,944	1,890,021	652,069	52,783,923		
17	52,783,923	1,912,563	629,527	50,871,360	5.1566	1.5759
18	50,871,360	1,935,373	606,717	48,935,987		
19	48,935,987	1,958,455	583,635	46,977,532		
20	46,977,532	1,981,813	560,278	44,995,719		
21	44,995,719	2,005,449	536,641	42,990,270	5.4070	1.3255
22	42,990,270	2,029,367	512,723	40,960,903		
23	40,960,903	2,053,570	488,520	38,907,333		
24	38,907,333	2,078,062	464,028	36,829,271		
25	36,829,271	2,102,846	439,244	34,726,425	5.6696	1.0629
26	34,726,425	2,127,926	414,165	32,598,500		
27	32,598,500	2,153,304	388,786	30,445,196		
28	30,445,196	2,178,986	363,105	28,266,210		
29	28,266,210	2,204,973	337,117	26,061,237	5.9450	0.7875
30	26,061,237	2,231,271	310,819	23,829,966		
31	23,829,966	2,257,882	284,208	21,572,084		
32	21,572,084	2,284,811	257,279	19,287,273		
33	19,287,273	2,312,061	230,030	16,975,212	6.2337	0.4988
34	16,975,212	2,339,635	202,455	14,635,577		
35	14,635,577	2,367,539	174,551	12,268,038		
36	12,268,038	2,395,775	146,315	9,872,262		
37	9,872,262	2,424,349	117,742	7,447,914	6.5364	0.1960
38	7,447,914	2,453,263	88,828	4,994,651		
39	4,994,651	2,482,522	59,569	2,512,129		
40	2,512,129	2,512,129	29,961	-		

