



National Electric Power Regulatory Authority
Islamic Republic of Pakistan

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Registrar

No. NEPRA/TRF-203/PWEGL-2012/4860-4862
May 30, 2012

Subject: Decision of National Electric Power Regulatory Authority in the matter of Application of Pakistan Wind Energy Generation (Pvt.) Ltd. Opting for Upfront Tariff for Wind Energy Generation (Case No. NEPRA/TRF-203/PWEGL-2012) Intimation of Decision of Tariff pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997)

Dear Sir,

Please find enclosed herewith the subject Decision of the Authority along with Annexure-I (09 pages) in Case No. NEPRA/TRF-203/PWEGL-2012.

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) and Rule 16(11) of the National Electric Power Regulatory Authority (Tariff Standards and Procedure) Rules, 1998.

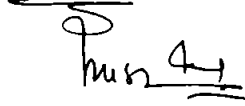
3. Please note that only Order of the Authority at para 03 of the Decision relating to the reference tariff, adjustments, indexation and terms and conditions etc along with Annexure-I needs to be notified in the official Gazette.

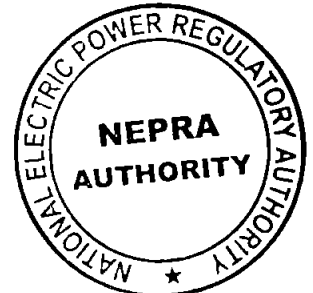
Enclosure: As above

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

CC:

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


(Syed Safer Hussain)

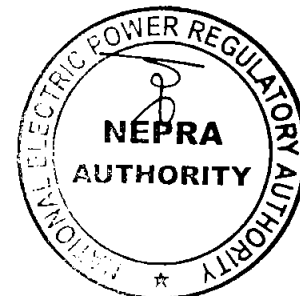




DECISION OF NATIONAL ELECTRIC POWER REGULATORY AUTHORITY IN THE MATTER OF
APPLICATION OF PAKISTAN WIND ENERGY GENERATION (PVT.) LIMITED
OPTING FOR UPFRONT TARIFF FOR WIND ENERGY GENERATION
CASE NO. NEPRA/TRF-203/PWEGGL-2012

1. Pakistan Wind Energy Generation (Pvt.) Limited (hereinafter referred to as the "applicant") submitted on February 16, 2012 its unconditional acceptance of upfront tariff for wind power projects (hereinafter referred to as "upfront tariff"), determined by the National Electric Power Regulatory Authority (hereinafter referred to as the "Authority") vide determination dated October 06, 2011, for its proposed wind power generation project of 4.80 MW installed capacity to be located at Jhampir, District Thatta, Sind. The said application was found incomplete. The applicant was informed vide letter No. TRF-100/1410 dated February 20, 2012 regarding the deficiencies and the application was returned for fulfilling the deficiencies. The applicant vide letter received on March 15, 2012 responded to the aforesaid letter of the Authority. However, the information provided by the applicant was still deficient, therefore the applicant was again asked to furnish the required information vide letter No. TRF-100/2138 dated March 21, 2012. The applicant submitted the information on May 11, 2012. The applicant has applied for granting upfront tariff on the basis of 100% local loan.
2. The Authority has noted that Alternative Energy Development Board vide letter No. B/3/1/PWEGPL/10 dated March 09, 2012 has recommended the applicant for grant of upfront tariff and in the said letter has also stated that the letter of intent of the applicant is valid and the wind turbine proposed by it is internationally IEC certified. The Authority is also cognizant of the fact that consent of the power purchaser for procurement of the electricity has not been submitted by the applicant. However, the Authority has also noted that Policy For Development Of Renewable Energy For Power Generation, 2006 specifies that it shall be mandatory for the power distribution utilities to buy all the electricity offered to them by the renewable energy projects in accordance with the provisions detailed in that policy. Further, National Transmission and Despatch Company Limited through letter dated February 02, 2012 has also supported the applicant and has referred the matter to Hyderabad Electric Supply Company Limited for issuing consent letter and other necessary actions. Therefore, in view of the available information and consideration of relevant record, the Authority has decided to accept this application and has decided as follows:

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3. ORDER

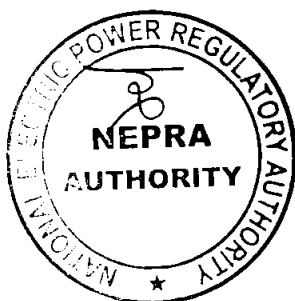
Pursuant to Rule 6 of the National Electric Power Regulatory Authority Licensing (Generation) Rules, 2000, Pakistan Wind Energy Generation (Pvt.) Limited (the applicant) is allowed to charge the following specified/approved tariff for delivery of electricity to the power purchaser:

REFERENCE TARIFF ON BOO BASIS

Tariff figures in Rs./kWh.

Years	O & M (including insurance)	Return on equity, etc.	Principal repayment of debt	Interest	Total tariff
1	2.2591	5.0874	2.9588	10.7983	21.1036
2	2.2591	5.0874	3.4714	10.2857	21.1036
3	2.2591	5.0874	4.0728	9.6843	21.1036
4	2.2591	5.0874	4.7783	8.9788	21.1036
5	2.2591	5.0874	5.6061	8.1510	21.1036
6	2.2591	5.0874	6.5773	7.1798	21.1036
7	2.2591	5.0874	7.7168	6.0403	21.1036
8	2.2591	5.0874	9.0536	4.7035	21.1036
9	2.2591	5.0874	10.6220	3.1351	21.1036
10	2.2591	5.0874	12.4622	1.2949	21.1036
11 to 20	2.2591	5.0874	-	-	7.3465
Levelized – Rs./kWh.					17.2755
Indexation	PKR/US \$ & US CPI	PKR/US \$	-	KIBOR	

- The terms and conditions specified here in form an integral part of this tariff.
- This tariff is applicable for wind power generation only.
- The power purchaser will not take the wind risk; the applicant will be required to account for this risk.
- The tariff allowed to the applicant will become applicable only after its plant and machinery is certified to be new and of acceptable quality by the Alternative Energy Development Board.



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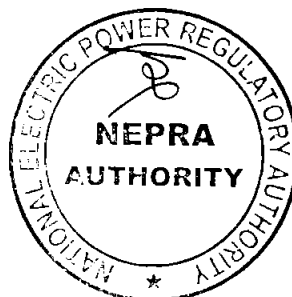


- v) The tariff will only be available to the applicant, if it achieves financial close by December 31, 2012. The up-front tariff granted will no longer remain applicable/valid, if financial close is not achieved by December 31, 2012.
- vi) In the above tariff no adjustment for certified emission reductions 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 government policy, as amended from time to time.
- vii) 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, failure of the applicant to complete construction within 18 months of financial close will not invalidate the tariff granted.
- viii) The above tariff will be applicable for a period of twenty years (20) from the commencement of commercial operations.
- ix) The decision of the applicant to opt for upfront tariff is irrevocable.
- x) **Pass-Through Items**

This tariff has not accounted for the following:

- Income tax on profit of the applicant from generation of electricity from wind; or
- Duties and/or taxes on the import of plant, machinery and equipment (other than Sindh infrastructure cess).

If the applicant is obligated to pay, any tax on its income from generation of electricity from wind, or any duties and/or taxes (other than Sindh infrastructure cess), not being of refundable nature, are imposed on the applicant upto 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 pass-through payment spread over a twelve (12) 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



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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 taxes imposed on third parties such as contractors, suppliers, consultants, etc., excluding adjustment for taxes imposed on dividend as stated below, will be allowed.

Financial impact of taxation on dividends and Sindh infrastructure cess has already been accounted for in the tariff. In case of change of tax rate on dividend from 7.5% or change in the rate of Sindh infrastructure cess from the rates prevailing at the time of this upfront tariff determination, the Authority on an application of the applicant, will allow adjustment of the same.

- xi) This tariff has been worked out on the basis of information provided by the applicant regarding its loan structure i.e. 100% local loan and will not be subject to any further change, regardless of any subsequent change(s) in the financing structure, etc., except for the adjustments in accordance with the onetime adjustment mechanism, detailed below, and the application of relevant adjustments / indexations as detailed in this order.

xii) **Onetime adjustment for PKR / US \$ exchange rate variation**

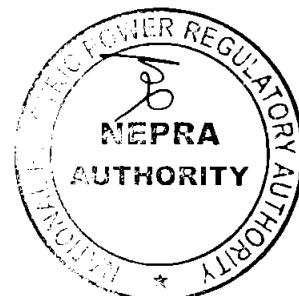
The tariff initially granted, will be subsequently adjusted, after 270 days of financial close. The applicant shall make a request for allowing onetime adjustment within 15 days of adjustment becoming due i.e. after 270 days of its financial close.

The base amount for quarter 1 (as indicated in Annex - I) will be adjusted for exchange rate variation, after 270 days of the financial close of the applicant, in accordance with the onetime adjustment mechanism stipulated below:

$$B_{(LFIN)} = (B_{(LREF)} \times 20\%) + (B_{(LREF)} \times 80\% \times ER_{(REV)} / ER_{(REF)})$$

Where:

$B_{(LFIN)}$ = The revised base amount for the first quarter after allowing onetime adjustment for exchange



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	rate parity
$B_{(LREF)}$	= The reference base amount (as indicated in Annex – I) for the first quarter
$ER_{(REV)}$	= The average, for a period of 270 days after financial close, of TT & OD selling rate of US dollar as notified by the National Bank of Pakistan
$ER_{(REF)}$	= Reference TT & OD selling rate of US dollar as notified by the National Bank of Pakistan i.e. 86

Note: After the revision of base amount of quarter 1, in accordance with the onetime adjustment mechanism stipulated above, the debt service schedule at Annex – I will be recalculated, on the same computation basis as already adopted, and revised principal repayment of debt and interest tariff components will be worked out for subsequent indexations.

xiii) **Indexations**

The tariff allowed to the applicant, after onetime adjustment, will remain unchanged throughout the tariff control period, except for the adjustments due to indexations. The indexations will be allowed on quarterly basis on 1st July, 1st October, 1st January and 1st April.

The mode of indexations will be as under:

a) **Indexations applicable to O & M (including insurance):**

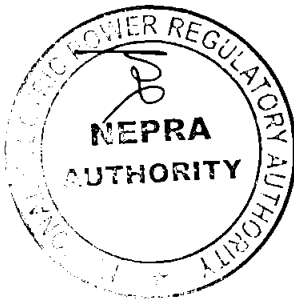
$$OM \& I_{(LREV)} = OM \& I_{(LREF)} * US CPI_{(REV)} / US CPI_{(REF)} * ER_{(REV)} / ER_{(REF)}$$

Where:

$OM \& I_{(LREV)}$ = The revised applicable O & M (including insurance) tariff component indexed with US CPI and exchange rate parity

$OM \& I_{(LREF)}$ = The reference O & M (including insurance) 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



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Labor Statistics)

US CPI_(REF) = Reference US CPI (all urban consumers) –
Current reference 225.722 US CPI (all
urban consumers) for the month of June
2011 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
as notified by the National Bank of
Pakistan – Current reference 86

b) Indexations applicable to return on equity, etc.

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

Where:

ROE_(LREV) = The revised applicable return on equity,
etc. tariff component indexed with
exchange rate parity

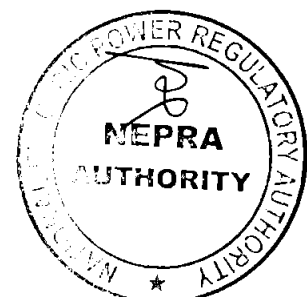
ROE_(LREF) = The reference return on equity, etc. tariff
component for the relevant period

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
as notified by the National Bank of
Pakistan – Current reference 86

c) Indexations applicable to interest

$$I_{(LREV)} = I_{(LFIN)} + [B_{(LFIN)} * (KIBOR_{(REV)} - 13.30\%) / 135,780,000]$$



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Where:

$I_{(LREV)}$	= The revised applicable interest tariff component indexed with 3 months KIBOR
$I_{(LFIN)}$	= The interest tariff component after allowing onetime adjustment for exchange rate parity
$B_{(LFIN)}$	= The revised base amount (as indicated in Annex – I) on quarterly basis after allowing onetime adjustment for exchange rate parity. 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 adjustments will be approved and announced by the Authority within fifteen days of the applicant's request for adjustment in tariff in accordance with the requisite indexation mechanism stipulated herein.

xiv) **Other Terms and Conditions of Tariff:**

a. **Design & Manufacturing Standards:**

Wind turbine generation system shall be designed and manufactured in accordance with the standards prescribed by Alternative Energy Development Board. 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 government policy, as amended from time to time.



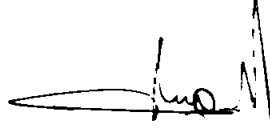
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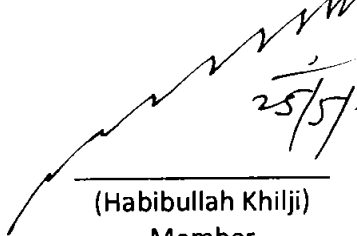


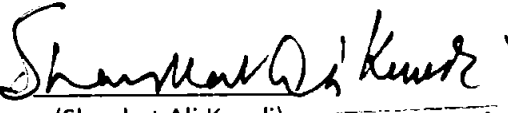
c. General:

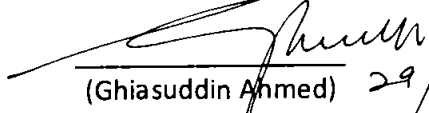
- The Energy Purchase Agreement should stipulate terms and conditions, ensuring that the power plant of the applicant allowed this tariff is properly maintained and continues to supply energy for the entire tariff control period of 20 years.
- Pre COD sale of electricity is allowed to the applicant, subject to the terms and conditions of EPA, 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 upfront tariff for wind power projects dated October 06, 2011 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.

AUTHORITY


(Khawaja Muhammad Naeem)
Member


(Habibullah Khilji)
Member


(Shaukat Ali Kundi)
Member


(Ghiasuddin Ahmed)
Acting Chairman / Member



PAKISTAN WIND ENERGY GENERATION (PVT.) LIMITED
Debt Servicing Schedule For Indexations Only (Local Loan)

Relevant Quarter	Base amount	Repayment	Interest @ 13.30% + 3% spread	Closing Balance	Principal Repayment of debt R / Ayr	Interest R / Ayr
1	9,140,679,813	94,503,329	372,482,702	9,046,176,484	2.9588	10.7983
2	9,046,176,484	98,354,340	368,631,692	8,947,822,145		
3	8,947,822,145	102,362,279	364,623,752	8,845,459,865		
4	8,845,459,865	106,533,542	360,452,490	8,738,926,323		
5	8,738,926,323	110,874,784	356,111,248	8,628,051,540	3.4714	10.2857
6	8,628,051,540	115,392,931	351,593,100	8,512,658,608		
7	8,512,658,608	120,095,193	346,890,838	8,392,563,415		
8	8,392,563,415	124,989,072	341,996,959	8,267,574,343		
9	8,267,574,343	130,082,377	336,903,654	8,137,491,966	4.0728	9.6843
10	8,137,491,966	135,383,234	331,602,798	8,002,108,732		
11	8,002,108,732	140,900,101	326,085,931	7,861,208,631		
12	7,861,208,631	146,641,780	320,344,252	7,714,566,852		
13	7,714,566,852	152,617,432	314,368,599	7,561,949,419	4.7783	8.9788
14	7,561,949,419	158,836,593	308,149,439	7,403,112,827		
15	7,403,112,827	165,309,184	301,676,848	7,237,803,643		
16	7,237,803,643	172,045,533	294,940,498	7,065,758,110		
17	7,065,758,110	179,056,389	287,929,643	6,886,701,721	5.6061	8.1510
18	6,886,701,721	186,352,936	280,633,095	6,700,348,785		
19	6,700,348,785	193,946,818	273,039,213	6,506,401,967		
20	6,506,401,967	201,850,151	265,135,880	6,304,551,815		
21	6,304,551,815	210,075,545	256,910,486	6,094,476,270	6.5773	7.1798
22	6,094,476,270	218,636,123	248,349,908	5,875,840,147		
23	5,875,840,147	227,545,546	239,440,486	5,648,294,601		
24	5,648,294,601	236,818,026	230,168,005	5,411,476,575		
25	5,411,476,575	246,468,361	220,517,670	5,165,008,214	7.7168	6.0403
26	5,165,008,214	256,511,947	210,474,085	4,908,496,267		
27	4,908,496,267	266,964,809	200,021,223	4,641,531,458		
28	4,641,531,458	277,843,625	189,142,407	4,363,687,834		
29	4,363,687,834	289,165,752	177,820,279	4,074,522,081	9.0536	4.7035
30	4,074,522,081	300,949,257	166,036,775	3,773,572,825		
31	3,773,572,825	313,212,939	153,773,093	3,460,359,886		
32	3,460,359,886	325,976,366	141,009,665	3,134,383,520		
33	3,134,383,520	339,259,903	127,726,128	2,795,123,617	10.6220	3.1351
34	2,795,123,617	353,084,744	113,901,287	2,442,038,873		
35	2,442,038,873	367,472,947	99,513,084	2,074,565,925		
36	2,074,565,925	382,447,470	84,538,561	1,692,118,455		
37	1,692,118,455	398,032,204	68,953,827	1,294,086,251	12.4622	1.2949
38	1,294,086,251	414,252,017	52,734,015	879,834,234		
39	879,834,234	431,132,786	35,853,245	448,701,447		
40	448,701,447	448,701,447	18,284,584	0		

Denominator for tariff component calculation : 135,780,000

Note: These figures have been worked out for the purposes of indexation only.

