



**Registrar**

# **National Electric Power Regulatory Authority**

## **Islamic Republic of Pakistan**

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No. NEPRA/TRF-290/NBT-II-2014/15229-15231

November 21, 2014

**Subject: Decision of National Electric Power Regulatory Authority in the matter of Application of NBT Wind Power Pakistan II (Private) Ltd. Opting for Upfront Tariff for Wind Power Projects [Case No. NEPRA/TRF-290/NBT-II-2014]**

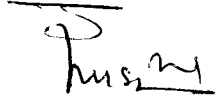
Dear Sir,

Please find enclosed herewith the subject Decision of the Authority along with Annexure-I (11 pages) in Case No. NEPRA/TRF-290/NBT-II-2014.

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 7 of the Decision along with Annexure-I needs to be notified in the official Gazette.

Enclosure: As above

  
( Syed Safer Hussain ) 21.11.14

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

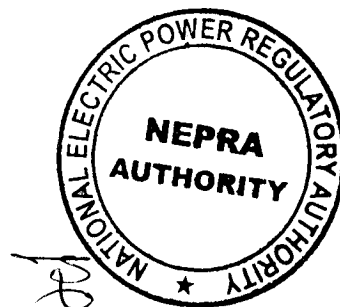
CC:

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



**DECISION OF NATIONAL ELECTRIC POWER REGULATORY AUTHORITY IN  
THE MATTER OF APPLICATION OF NBT WIND POWER PAKISTAN II (PRIVATE) LIMITED  
OPTING FOR UPFRONT TARIFF FOR WIND POWER PROJECTS**

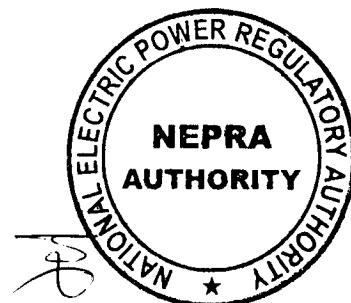
1. NBT Wind Power Pakistan II (Private) Limited (hereinafter referred to as the "applicant") had submitted application conveying unconditional acceptance of upfront tariff for wind power generation projects (hereinafter referred to as the "upfront tariff"), determined by the National Electric Power Regulatory Authority (hereinafter referred to as the "Authority") vide determination dated April 24, 2013 (hereinafter referred to as the "determination"), with all the terms, conditions and assumptions provided therein, for its proposed wind power generation project of 249.60 MW installed capacity to be located at Union Council Jhangri, Taluka and District Thatta, Sindh. The original application was submitted by the applicant within 365 days from the date of determination.
2. The Authority noted that clause 51 (iv) of the determination, required the recommendation of Alternative Energy Development Board (hereinafter referred to as the "AEDB") for the grant of upfront tariff and a confirmation from AEDB that the plant and machinery proposed by the applicant is new and of acceptable quality. The Authority observed that instead of AEDB, the applicant has submitted a copy of LOI no. DAE/Wind/45/2014 dated March 27, 2014 issued by the Directorate of Alternative Energy, Energy Department, Government of Sindh (hereinafter referred to as the "GOS"). Further, GOS vide letter no. DAE/Wind/45/2014 dated July 14, 2014 has also confirmed that the applicant is holding a valid LOI for its 250 MW wind power project and has recommended the applicant for grant of upfront tariff. In the said letter it has also been submitted by GOS, that the EPC contractor and wind turbine generator supplier of the applicant have certified that they will provide brand new wind turbines and the wind turbines and all its related equipment will be reliable, efficient and of highest international standards with proven technology. GOS in the aforesaid letter has also stated, that through documents provided, they have noted that the wind turbines proposed by the applicant are internationally certified as per IEC standards. GOS has also stated that the proposed wind turbines have not been imported yet and physical inspection is the responsibility of power purchaser.
3. The Authority, keeping in view the fact that previously AEDB had issued an LOI to the applicant, vide letter no. NEPRA/TRF-100/11026 dated September 22, 2014 requested AEDB to inform, if anything is adverse on the part of the applicant which bars the Authority from processing the applications of the applicant for the grant of generation license and tariff determination. AEDB vide letter no. B/3/1/NBT II & III/14 dated October 09, 2014 has submitted that the applicant does not possess an LOI issued by AEDB and the Authority may process application of the applicant as per rules/regulation/policy. The Authority keeping in view the stipulation of regulation 4 (3) (iv) read with regulation 2(1)(h) of the 'National



Electric Power Regulatory Authority Up-front Tariff (Approval & Procedure) Regulations, 2011' i.e. the application shall be accompanied with letter of intent/letter of support issued by the relevant agency, considers that the letter of intent, recommendation and confirmation of GOS is acceptable for the grant of upfront tariff.

4. The Authority has also noted that the power purchaser vide letter no. GM/CPPA/CE-II/MT-IV/NBT/6262-66 dated October 10, 2014 has certified that the necessary infrastructure to evacuate power from the applicant will be made available by it prior to commercial operations date of the applicant. The power purchaser has further stated in the aforesaid letter, that in case of any financial loss due to non-availability of infrastructure, it will be responsible. The power purchaser has submitted that to avoid unnecessary expenses, the construction of necessary infrastructure will commence after the achievement of financial close by the applicant. The Authority, after consideration of submissions of the power purchaser, 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. The Authority has also found that the applicant has mentioned its expected date of financial close as December 31, 2014 and its expected commercial operations date as January 31, 2017, meaning thereby that its expected construction period works out to more than 18 months. The Authority noted that the determination envisages maximum construction period after financial close of 18 months. The Authority hereby directs the applicant to comply with the terms and conditions of the determination, unconditionally accepted by it, in letter and spirit.
6. The Authority has noted that the applicant has applied for grant of upfront tariff on the basis of 100% foreign loan. Pursuant to the decision of the Authority dated May 02, 2014 in the matter of review of determination and considering the application along with other relevant information and documents, the Authority has decided to grant upfront tariff to the applicant. The Authority hereby directs that the Energy Purchase Agreement, agreed between the applicant and the power purchaser, shall be submitted to the Authority for review.
7. **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 Up-front Tariff (Approval & Procedure) Regulations, 2011, NBT Wind Power Pakistan II (Private) 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**

Years	O & M	Insurance	Return On Equity	Principal Repayment Of Debt	Interest	Total Tariff
1	1.6040	0.7833	4.6902	5.2331	3.2496	15.5602
2	1.6040	0.7833	4.6902	5.5025	2.9802	15.5602
3	1.6040	0.7833	4.6902	5.7857	2.6970	15.5602
4	1.6040	0.7833	4.6902	6.0836	2.3991	15.5602
5	1.6040	0.7833	4.6902	6.3967	2.0860	15.5602
6	1.6040	0.7833	4.6902	6.7260	1.7567	15.5602
7	1.6040	0.7833	4.6902	7.0722	1.4105	15.5602
8	1.6040	0.7833	4.6902	7.4362	1.0465	15.5602
9	1.6040	0.7833	4.6902	7.8190	0.6637	15.5602
10	1.6040	0.7833	4.6902	8.2215	0.2612	15.5602
11 to 20	1.6040	0.7833	4.6902	-	-	7.0775
Levelized – Rs./kWh.						13.1998
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 13.5244/kWh.

- This tariff is applicable for wind power generation only.
- This tariff will be limited to the extent of net annual energy generation supplied to the power purchaser up to 31% net annual plant capacity factor. Net annual energy generation supplied to the power purchaser in a year, in excess of 31% net annual plant capacity factor will be charged at the following tariffs:

Net annual plant capacity factor	% of the prevalent tariff
Above 31% to 32%	75%
Above 32% to 33%	50%
Above 33% to 34%	25%
Above 34% to 35%	20%
Above 35%	10%

- iii) The power purchaser will not take the wind risk; the applicant will be required to account for this risk.
- iv) The applicant will have to achieve financial close by March 31, 2015. The upfront tariff granted to the applicant will no longer remain applicable/valid, if financial close is not achieved by the applicant by March 31, 2015 or generation license is declined to the applicant.
- v) The decision of the applicant to opt for upfront tariff is irrevocable.
- 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 Policy For Development Of Renewable Energy For Power Generation 2006, 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, the failure of the applicant to complete construction within 18 months of financial close will not invalidate the tariff granted to it.
- viii) This tariff will be applicable for a period of twenty years (20) from the commencement of commercial operations.
- ix) The terms and conditions specified here in form an integral part of this tariff.
- x) 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 in this order.
- xi) **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., excluding adjustment for taxes imposed on dividend as stated below, will be allowed.

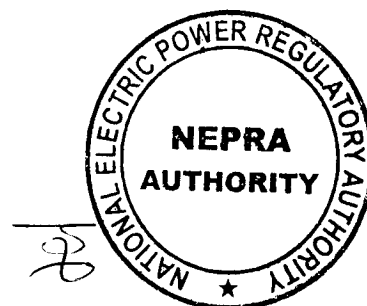
Withholding tax on dividends will also be allowed as a pass through item just like other taxes. The power purchaser shall make payment on account of withholding tax at the time of actual payment of dividend, on production of original receipts, subject to maximum of 7.5% of return on equity. In case the applicant does not declare a dividend in a particular year or only declares a partial dividend, then the difference in the withholding tax amount (between what is paid in that year and the total entitlement as per the net return on equity) would be carried forward and accumulated so that the applicant is able to recover the same as a pass through from the power purchaser in future on the basis of the total dividend payout. Adjustment for variation in tax rate on dividend from 7.5% shall also be allowed as a pass through item by the power purchaser, after satisfying itself that tax rates have actually varied. 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.

xii) Indexations/adjustment

The tariff allowed to the 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 mode 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:

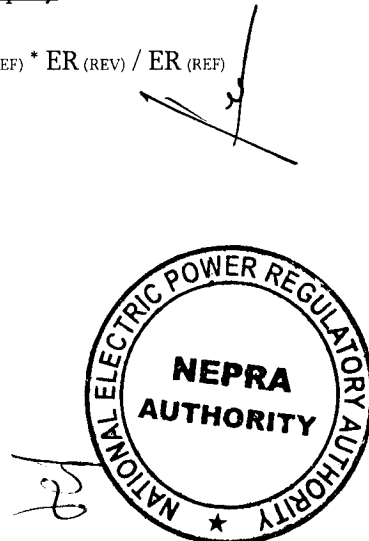
- $OM_{(FREV)}$  = The revised applicable O & M tariff component indexed with US CPI and exchange rate parity
- $OM_{(FREF)}$  = The reference O & M tariff component for the relevant period
- $US\ CPI_{(REV)}$  = The revised US CPI (all urban consumers) based on latest available information with respect to US CPI (notified by US Bureau of Labor Statistics)
- $US\ CPI_{(REF)}$  = Reference US CPI (all urban consumers) – Current reference 229.601 US CPI (all urban consumers) for the month of December 2012 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 97.60

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 applicant 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

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



Where:

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

$ROE_{(FREF)}$  = 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 97.60

d) Indexations applicable to principal repayment of debt

$$P_{(FREV)} = P_{(FREF)} * ER_{(REV)} / ER_{(REF)}$$

Where:

$P_{(FREV)}$  = The revised applicable principal repayment of debt tariff component indexed with exchange rate parity

$P_{(FREF)}$  = The reference principal repayment of debt 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 97.60



e) Indexations applicable to interest after achieving COD

$$I_{(REV)} = \left[ I_{(REF)} * ER_{(REV)} / ER_{(REF)} \right] + \left[ B_{(REF)} * ER_{(REV)} * (LIBOR_{(REV)} - 0.301\%) / 135,780,000 \right]$$

Where:

$I_{(REV)}$  = The revised applicable interest tariff component indexed with 3 months LIBOR and exchange rate parity

$I_{(REF)}$  = The reference interest 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

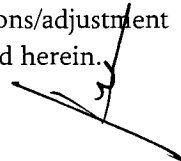
$ER_{(REF)}$  = Reference TT & OD selling rate of US dollar – current reference 97.60

$B_{(REF)}$  = The base amount (as indicated in Annex – I) on a quarterly basis. 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)

$LIBOR_{(REV)}$  = Revised 3 months LIBOR rate 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 applicant's request for indexations/adjustment in tariff in accordance with the requisite mechanisms stipulated herein.



xiii) 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 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 new, is of a quality acceptable to it and is the same as certified to be of acceptable quality by the Directorate of Alternative Energy, Energy Department, Government of Sindh.
- The Energy Purchase Agreement shall stipulate terms and conditions, regarding periodic physical inspection of plant and machinery, ensuring that the power plant of the applicant 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 the Authority in the matter of upfront tariff for wind power generation dated April 24, 2013, decision of the Authority in the matter of review of determination of upfront tariff for wind power generation dated May 02, 2014 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.

8. The order at paragraph 7 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

(Khawaja Muhammad Naeem)  
Member

(Maj (R) Haroon Rashid)  
Member

(Himayat Ullah Khan)  
Member

(Habibullah Khilji)  
Vice Chairman

21.11.14



**NBT Wind Power Pakistan II (Private) Limited**  
**Table for Base amount (Foreign Financing)**

<b>Relevant quarter</b>	<b>Base amount (in million US \$)</b>
1	92,203,119
2	90,417,168
3	88,608,666
4	86,777,326
5	84,922,861
6	83,044,979
7	81,143,383
8	79,217,776
9	77,267,853
10	75,293,307
11	73,293,827
12	71,269,099
13	69,218,804
14	67,142,619
15	65,040,217
16	62,911,266
17	60,755,433
18	58,572,376
19	56,361,753
20	54,123,216
21	51,856,411
22	49,560,982
23	47,236,568
24	44,882,802
25	42,499,314
26	40,085,728
27	37,641,665
28	35,166,739
29	32,660,562
30	30,122,737
31	27,552,867
32	24,950,545
33	22,315,362
34	19,646,904
35	16,944,749
36	14,208,473
37	11,437,645
38	8,631,828
39	5,790,581
40	2,913,456

