



# National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/TRF-353/ZPPL-2016/6503-6505  
May 13, 2016

Subject: **Decision of National Electric Power Regulatory Authority in the matter of Application of Zephyr Power (Private) Ltd. (ZPPL) Opting for Upfront Tariff for Wind Power Projects [Case No. NEPRA/TRF-353/ZPPL-2016]**

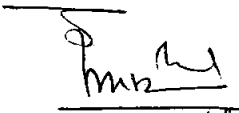
Dear Sir,

Please find enclosed herewith the subject Decision of the Authority along with Annexure-I (14 pages) in Case No. NEPRA/TRF-353/ZPPL-2016.

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. Order of the Authority at paragraph 5 of the Decision needs to be notified in the official Gazette.

Enclosure: As above

  
13.05.16

( Syed Safeer Hussain )

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

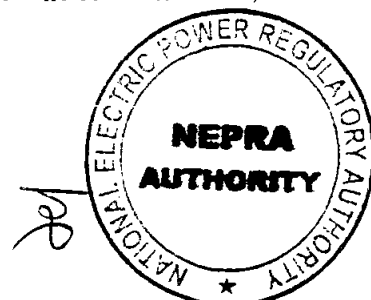
CC:

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 ZEPHYR POWER (PRIVATE) LIMITED OPTING FOR UPFRONT TARIFF FOR WIND POWER PROJECTS

1. Zephyr Power (Private) Limited (hereinafter referred to as "ZPPL" or "the Applicant" ) on January 27, 2016 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 revised on October 19, 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 48.3 MW installed capacity to be located at Gharo, Sindh.
2. The Authority noted that the Applicant has applied for grant of Upfront Tariff, 2015 on the basis of 50% foreign loan and 50% local loan. Alternative Energy Development Board vide its letter dated January 18, 2016 recommended the Applicant for the award of Upfront Tariff, 2015. In accordance with the Annex-V of the Upfront Tariff, 2015, the Applicant has certified that all the plant and machinery to be installed for ZPPL shall be brand new and of international standards. Further, the Authority noted that the power purchaser, i.e. Central Power Purchasing Agency Guarantee Limited ("CPPA-G") vide its letter dated December 28, 2015 has confirmed that necessary arrangements will be in place, to evacuate and absorb power in the national grid, supplied by ZPPL and the Authority may award upfront tariff to the Applicant.
3. The Authority received a letter from National Transmission and Dispatch Company Limited ("NTDCL") wherein it was, inter alia, stated that **"the grid interconnection study of all Renewable Energy (RE) projects have not been vetted/approved yet by this office"**. The Authority decided to hold a meeting with NTDCL and CPPA-G for explanation of their position with respect to aforementioned NTDCL's letter. During the meeting and vide its letter no. CPPA (G) L/CEO/CE-II/MT-IV/NEPRA/851-54 dated February 07, 2016, CPPA-G informed the Authority that the projects for which the interconnection studies have already been approved are not affected by aforementioned NTDCL's letter. With its said letter, CPPA-G also provided a list of the wind power projects for which NTDCL has approved the grid interconnection studies and CPPA-G has issued power evacuation certificates. It was noted that the ZPPL was included in that list by the power purchaser.
4. ZPPL'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 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. Also, the Authority decides 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.

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**ORDER**

5. 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, ZPPL (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	3.6945	3.7695	4.2688	13.8716
2	1.5039	0.6349	3.6945	4.0608	3.9775	13.8716
3	1.5039	0.6349	3.6945	4.3789	3.6595	13.8716
4	1.5039	0.6349	3.6945	4.7265	3.3118	13.8716
5	1.5039	0.6349	3.6945	5.1069	2.9315	13.8716
6	1.5039	0.6349	3.6945	5.5233	2.5150	13.8716
7	1.5039	0.6349	3.6945	5.9798	2.0586	13.8716
8	1.5039	0.6349	3.6945	6.4803	1.5580	13.8716
9	1.5039	0.6349	3.6945	7.0298	1.0085	13.8716
10	1.5039	0.6349	3.6945	7.6335	0.4049	13.8716
11 to 20	1.5039	0.6349	3.6945	-	-	5.8332
Levelized – Rs./kWh.						11.6348

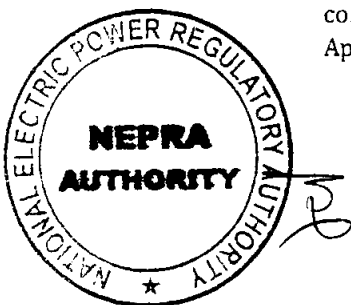
Levelized tariff discounted at 10% per annum works out to be US Cents 11.4629/kWh.

- 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:

Net annual plant capacity factor	% of the prevalent tariff
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 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 above mentioned timeline or a generation license is declined to it.
- v) The decision to opt for upfront tariff is irrevocable.
- vi) 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.
- 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 (20) years from the commencement of commercial operations.
- ix) The terms and conditions specified herein 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. 50% foreign loan and 50% 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 application of relevant indexations/adjustments as detailed below in this order.
- xi) 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 (foreign portion) and 3 months KIBOR of 8.22% plus a premium of 300 basis points (local portion). In case negotiated spreads is less than the said limits, the savings in the spreads over LIBOR and/or KIBOR 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 or KIBOR is higher than that mentioned above, no adjustment on the basis of actual higher premium will be allowed.
- xii) Adjustment on account of variations in LIBOR/KIBOR: The Authority has assessed interest during construction of USD 0.136 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 and KIBOR 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.

xiii) Adjustment on account of Sinosure Fees

An appropriate adjustment in benchmark project cost will be allowed on account of Sinosure or other credit insurance fees, where applicable, at actual not exceeding 7% of the total benchmark foreign portion of the total debt. In case the Applicant manage better alternative Sinosure or other credit insurance arrangement, the same will be considered at the time of allowing adjustment of such fees. The Applicant, if it intends to claim Sinosure or other such fees, shall submit relevant authentic documentary evidence to the Authority, within 15 days of commercial operations date of the project.

The allowed tariff is split into two parts for the purposes of indexation(s)/adjustment(s) as follows;

**Part I** - Calculated on the basis of project financing structure of equity plus 100% foreign loan

**REFERENCE TARIFF ON BOO BASIS**

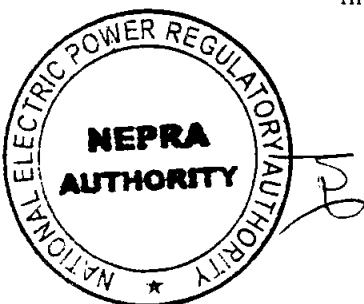
Rs./kWh

Years	O & M	Insurance	Return on equity	Principal repayment of debt	Interest	Total tariff
1	0.7519	0.3175	1.8472	2.1886	1.2657	6.3710
2	0.7519	0.3175	1.8472	2.2949	1.1594	6.3710
3	0.7519	0.3175	1.8472	2.4064	1.0480	6.3710
4	0.7519	0.3175	1.8472	2.5232	0.9311	6.3710
5	0.7519	0.3175	1.8472	2.6458	0.8086	6.3710
6	0.7519	0.3175	1.8472	2.7743	0.6801	6.3710
7	0.7519	0.3175	1.8472	2.9090	0.5453	6.3710
8	0.7519	0.3175	1.8472	3.0503	0.4041	6.3710
9	0.7519	0.3175	1.8472	3.1984	0.2559	6.3710
10	0.7519	0.3175	1.8472	3.3538	0.1006	6.3710
11 to 20	0.7519	0.3175	1.8472	-	-	2.9166
<b>Indexation</b>	PKR/USD & US CPI	PKR/USD	PKR/USD	PKR/USD	PKR/USD & LIBOR	

Indexations/adjustment for part I will be allowed in accordance with the mechanism for indexations/adjustment applicable for tariff calculated on the basis of project financing structure of equity plus 100% foreign loan as detailed in xvi (A) below.

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**Part II** - Calculated on the basis of project financing structure of equity plus 100% local loan

**REFERENCE TARIFF ON BOO BASIS**

Rs./kWh

Years	O & M	Insurance	Return on equity	Principal repayment of debt	Interest	Total tariff
1	0.7519	0.3175	1.8472	1.5809	3.0031	7.5006
2	0.7519	0.3175	1.8472	1.7659	2.8181	7.5006
3	0.7519	0.3175	1.8472	1.9725	2.6115	7.5006
4	0.7519	0.3175	1.8472	2.2033	2.3807	7.5006
5	0.7519	0.3175	1.8472	2.4611	2.1229	7.5006
6	0.7519	0.3175	1.8472	2.7491	1.8349	7.5006
7	0.7519	0.3175	1.8472	3.0707	1.5132	7.5006
8	0.7519	0.3175	1.8472	3.4301	1.1539	7.5006
9	0.7519	0.3175	1.8472	3.8314	0.7526	7.5006
10	0.7519	0.3175	1.8472	4.2797	0.3043	7.5006
11 to 20	0.7519	0.3175	1.8472	-	-	2.9166
<b>Indexation</b>	PKR/USD & US CPI	PKR/USD	PKR/USD	-	KIBOR	

Indexations/adjustment for part II will be allowed in accordance with the mechanism for indexations/adjustment applicable for tariff calculated on the basis of project financing structure of equity plus 100% local loan as detailed in xvi (B) below.

**xiv) Onetime adjustment for PKR / USD exchange rate variation**

Part-II initially granted, will be subsequently adjusted, after 270 days of financial close of the applicant. The base amount for quarter I (as indicated in Annex-II) will be adjusted for exchange rate variation, for 270 days after financial close, 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 rate parity

$B_{(LREF)}$  = The reference base amount (as indicated in Annex-II) for the first quarter



ER<sub>(REV)</sub> = 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<sub>(REF)</sub> = Reference TT & OD selling rate of US dollar i.e. 101.50

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

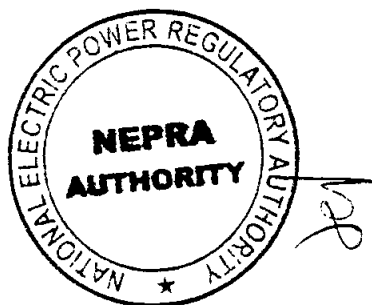
xv) Pass-through items

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.

xvi) Indexations/adjustment

The tariff allowed to Applicant, after one time adjustment where applicable, 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/ADJUSTMENT APPLICABLE TO PART I FOR TARIFF  
CALCULATED ON THE BASIS OF PROJECT FINANCING STRUCTURE OF EQUITY PLUS  
100% FOREIGN LOAN**

a) Indexations applicable to O & M:

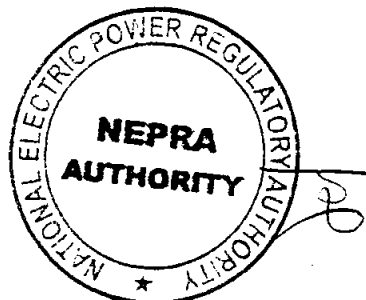
$$OM_{(REV)} = OM_{(REF)} * US\ CPI_{(REV)} / US\ CPI_{(REF)} * ER_{(REV)} / ER_{(REF)}$$

Where:

$OM_{(REV)}$	=	The revised applicable O&M tariff component indexed with US CPI and exchange rate parity
$OM_{(REF)}$	=	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. 97.33 million per MW (USD 0.958 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	=	$Ins_{(Ref)} / P_{(Ref)} * P_{(Act)}$
Where		
AIC	=	Adjusted insurance component of tariff
$Ins_{(Ref)}$	=	Reference insurance component of tariff
$P_{(Ref)}$	=	Reference premium @ 1% of Rs.97.33 million
$P_{(Act)}$	=	Actual premium per MW of installed capacity or 1% of USD 0.958 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

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

Where:

$ROE_{(REV)}$  = 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

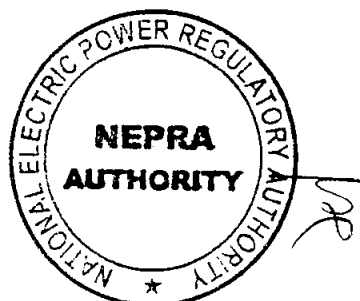
$ER_{(REF)}$  = Reference TT & OD selling rate of US dollar - current reference 101.50

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<sub>(REV)</sub> = Revised 3 months LIBOR rate as at the last day of the preceding quarter

**B) INDEXATIONS/ADJUSTMENT APPLICABLE TO PART II FOR TARIFF CALCULATED ON THE BASIS OF PROJECT FINANCING STRUCTURE OF EQUITY PLUS 100% LOCAL LOAN**

a) Indexations applicable to O & M:

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

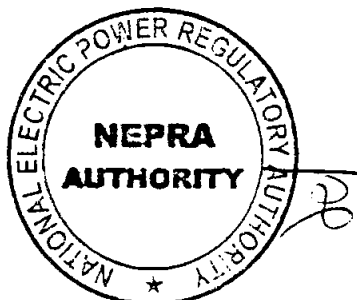
Where:

$OM_{(REV)}$  = The revised applicable O&M tariff component indexed with US CPI and exchange rate parity

$OM_{(REF)}$  = 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. 97.33 million per MW (USD 0.958 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	=	$Ins_{(Ref)} / P_{(Ref)} * P_{(Act)}$
Where		
AIC	=	Adjusted insurance component of tariff
$Ins_{(Ref)}$	=	Reference insurance component of tariff
$P_{(Ref)}$	=	Reference premium @ 1% of Rs.97.33 million
$P_{(Act)}$	=	Actual premium per MW of installed capacity or 1% of USD 0.958 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

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

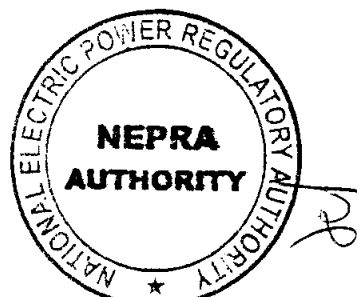
Where:

$ROE_{(REV)}$  = 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 101.50



d) Indexations applicable to interest after achieving COD

$$\Delta I = P_{(REV)} * (KIBOR_{(REV)} - 8.22\%) / 4$$

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 < 8.22%. 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 II), 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).

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

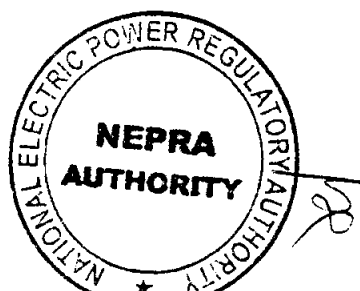
xvii) Other Terms and Conditions of Tariff:

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.

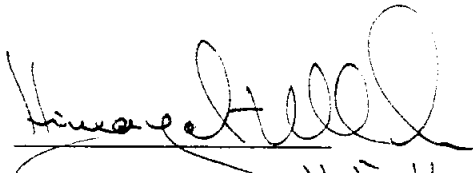



c. General:

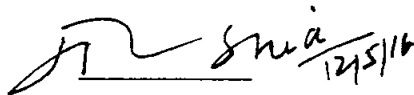
- The power purchaser before signing the Energy Purchase Agreement shall satisfy itself that the plant and machinery proposed to be installed is of a quality acceptable to it.
- Pre COD sale of electricity is allowed to the Applicant, subject to the terms and conditions of Energy Purchase Agreement, 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 revised on October 19, 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.

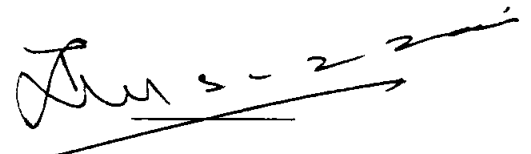
6. The order at paragraph 5 is recommended for notification by the Federal Government in the official gazette in accordance with Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.

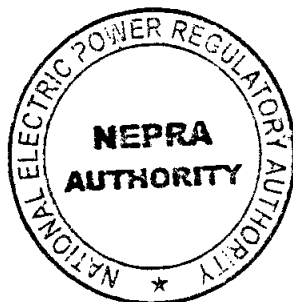
**AUTHORITY**

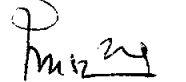
  
(Himayat Ullah Khan)  
Member  
11.5.16

  
(Syed Masood ul Hassan Naqvi)  
Member  
12/5

  
(Maj. (R) Haroon Rashid)  
Member  
12/5/16

  
(Brig. (R) Tariq Saddozai)  
Chairman  
13/5/16



  
13.05.16

## Zephyr Power (Private) Limited

Debt Servicing Schedule based on 100% foreign financing for the purpose of Indexation of debt component only

Relevant Quarters	Base Amount (USD)	Principal Repayment (USD)	Interest (USD)	Balance Principal (USD)	Annual Principal Repayment Rs./kWh	Annual Interest Rs./kWh
1	837,725	16,466	9,991	821,259	2.1886	1.2657
2	821,259	16,662	9,795	804,597		
3	804,597	16,861	9,596	787,737		
4	787,737	17,062	9,395	770,675		
5	770,675	17,265	9,191	753,410	2.2949	1.1594
6	753,410	17,471	8,986	735,939		
7	735,939	17,680	8,777	718,259		
8	718,259	17,890	8,566	700,369		
9	700,369	18,104	8,353	682,265	2.4064	1.0480
10	682,265	18,320	8,137	663,945		
11	663,945	18,538	7,919	645,407		
12	645,407	18,759	7,697	626,648		
13	626,648	18,983	7,474	607,665	2.5232	0.9311
14	607,665	19,209	7,247	588,455		
15	588,455	19,438	7,018	569,017		
16	569,017	19,670	6,786	549,347		
17	549,347	19,905	6,552	529,442	2.6458	0.8086
18	529,442	20,142	6,314	509,299		
19	509,299	20,383	6,074	488,917		
20	488,917	20,626	5,831	468,291		
21	468,291	20,872	5,585	447,420	2.7743	0.6801
22	447,420	21,121	5,336	426,299		
23	426,299	21,372	5,084	404,927		
24	404,927	21,627	4,829	383,299		
25	383,299	21,885	4,571	361,414	2.9090	0.5453
26	361,414	22,146	4,310	339,268		
27	339,268	22,410	4,046	316,857		
28	316,857	22,678	3,779	294,179		
29	294,179	22,948	3,509	271,231	3.0503	0.4041
30	271,231	23,222	3,235	248,009		
31	248,009	23,499	2,958	224,511		
32	224,511	23,779	2,678	200,732		
33	200,732	24,063	2,394	176,669	3.1984	0.2559
34	176,669	24,350	2,107	152,319		
35	152,319	24,640	1,817	127,679		
36	127,679	24,934	1,523	102,745		
37	102,745	25,231	1,225	77,514	3.3538	0.1006
38	77,514	25,532	924	51,982		
39	51,982	25,837	620	26,145		
40	26,145	26,145	312	-		



## Zephyr Power (Private) Limited

Debt Servicing Schedule based on 100% local financing for the purpose of Indexation of debt component only

Relevant Quarters	Base Amount (USD)	Principal Repayment (USD)	Interest (USD)	Balance Principal (USD)	Annual Principal Repayment Rs./kWh	Annual Interest Rs./kWh
1	837.725	11.610	23.498.18	826.115	1.5809	3.0031
2	826.115	11.936	23.172.52	814.179		
3	814.179	12.271	22.837.71	801.908		
4	801.908	12.615	22.493.52	789.293		
5	789.293	12.969	22.139.67	776.324	1.7659	2.8181
6	776.324	13.333	21.775.90	762.992		
7	762.992	13.707	21.401.92	749.285		
8	749.285	14.091	21.017.45	735.194		
9	735.194	14.486	20.622.20	720.708	1.9725	2.6115
10	720.708	14.893	20.215.86	705.815		
11	705.815	15.310	19.798.12	690.505		
12	690.505	15.740	19.368.67	674.765		
13	674.765	16.181	18.927.16	658.584	2.2033	2.3807
14	658.584	16.635	18.473.28	641.949		
15	641.949	17.102	18.006.66	624.847		
16	624.847	17.581	17.526.96	607.266		
17	607.266	18.075	17.033.80	589.191	2.4611	2.1229
18	589.191	18.582	16.526.80	570.609		
19	570.609	19.103	16.005.59	551.506		
20	551.506	19.639	15.469.75	531.868		
21	531.868	20.190	14.918.89	511.678	2.7491	1.8349
22	511.678	20.756	14.352.57	490.922		
23	490.922	21.338	13.770.37	469.584		
24	469.584	21.937	13.171.83	447.648		
25	447.648	22.552	12.556.51	425.096	3.0707	1.5132
26	425.096	23.185	11.923.93	401.911		
27	401.911	23.835	11.273.60	378.076		
28	378.076	24.503	10.605.04	353.573		
29	353.573	25.191	9.917.72	328.382	3.4301	1.1539
30	328.382	25.897	9.211.12	302.485		
31	302.485	26.624	8.484.70	275.861		
32	275.861	27.371	7.737.90	248.490		
33	248.490	28.138	6.970.16	220.352	3.8314	0.7526
34	220.352	28.928	6.180.88	191.425		
35	191.425	29.739	5.369.46	161.686		
36	161.686	30.573	4.535.28	131.112		
37	131.112	31.431	3.677.70	99.682	4.2797	0.3043
38	99.682	32.312	2.796.07	67.369		
39	67.369	33.219	1.889.71	34.151		
40	34.151	34.151	957.92	0		

