

National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No.NEPRA/TRF-247/SWPCL-2013/12999-13001 November 21, 2013

Subject: Decision of National Electric Power Regulatory Authority in the matter of Application of Sapphire Wind Power Company Ltd. Opting for Upfront Tariff for Wind Power Projects [Case No. NEPRA/TRF-247/SWPCL-2013]

Dear Sir,

Please find enclosed herewith the subject Decision of the Authority along with Annexure-I (12 pages) in Case No. NEPRA/TRF-247/SWPCL-2013.

- 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 only Order of the Authority at para 6 of the Decision relating to the reference tariff, adjustments & indexation etc along with Annexure-I needs to be notified in the official Gazette.

Enclosure: As above

(Syed Safeer Hussain)

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

CC:

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

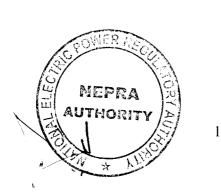


DECISION OF NATIONAL ELECTRIC POWER REGULATORY AUTHORITY IN THE MATTER OF APPLICATION OF SAPPHIRE WIND POWER COMPANY LIMITED OPTING FOR UPFRONT TARIFF FOR WIND POWER PROJECTS

- Sapphire Wind Power Company Limited (hereinafter referred to as "Sapphire") submitted application dated August 12, 2013 for 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, with all the terms, conditions and assumptions provided therein, for its proposed wind power generation project of 49.50 MW installed capacity to be located at Jhampir, District Thatta, Sind. On scrutiny, the application was found incomplete and the registrar asked Sapphire to furnish the necessary information. Sapphire thereafter furnished deficient the information/documents/explanations.
- 2. The Authority noted that in order to ensure the alignment of activities of construction of wind power plants with the construction of power evacuation facilities, the upfront tariff stipulated that only those wind power generation companies who have a certificate from the power purchaser, that the power purchaser will have the necessary infrastructure ready and in place to evacuate all the power supplied by the applicant, will be eligible for the upfront tariff. The Authority observed that the upfront tariff required an unconditional certification from the power purchaser, however, the power purchaser while providing the aforesaid certification, in majority of cases has specified following stages and timelines by which it will be in a position to evacuate power from the various applicants of upfront tariff:

Stage No.	<u>Timeline For Completion</u>
2	June 2014
3	June 2015
4	December 2016

The Authority also noted that the upfront tariff stipulates that the companies opting for upfront tariff will have to achieve financial close by September 30, 2014. Further, the interconnection availability dates specified by the power purchaser for some of the applicants of upfront tariff, were even beyond the commercial operations dates envisaged by these applicants or by the upfront tariff. The Authority took up the issue of evacuation





of power with the power purchaser and vide letter no. NEPRA/CM/16/13 dated October 08, 2013 also brought the said issue to the attention of the Secretary, Ministry of Water and Power, with a request that a final comprehensive plan along with the power purchaser comments to provide connectivity for evacuation of 500 MW power may be provided. In response thereto, the power purchaser vide letter no. MD/NTDCL/4306-11 dated October 23, 2013 submitted that four power plants who have opted for the upfront tariff already fall in stage 2 and 3, whereas timeline for the remaining 300 MW can be crashed by six months. The power purchaser further submitted that it may be possible to accommodate all the power plants by December 2015. However, it will be bearing the risk of payment against non-project missed volumes i.e. payment against the volume of electric energy not delivered by the power producer solely due to a non-project event. Further, on direction of the Authority, the power purchaser vide e-mail dated November 12, 2013 provided the stage wise power evacuation list of companies who have applied to the Authority for grant of the upfront tariff.

- 3. The Authority noted that the timelines confirmed by the power purchaser for completion of power purchaser interconnection facilities in stage 2 and 3 are within the maximum timeline for commencing commercial operations considered for the development of upfront tariff. The Authority after due consideration of all the relevant facts has decided that it will be fair to accept all the applications for upfront tariff, considered for stage 2 and 3 by the power purchaser, provided that the applications are complete.
- 4. The Authority has noted that Sapphire has applied for granting upfront tariff on the basis of 100% foreign loan. The Authority has also noted that the AEDB vide letter no. B/3/1/SWPCL/07 dated June 14, 2013 has recommended Sapphire for grant of upfront tariff and in the said letter has also stated that the wind turbines proposed by Sapphire are internationally certified as per IEC standards. Further, in the said letter it has also been confirmed by AEDB that the petitioner is holding valid LOS for its 50 MW wind power project. The Authority furthermore noted that the power purchaser vide letter no. GM-CPPA-CE-II/MT-IV/SWPCL/7236-40 dated July 26, 2013 has also confirmed that it expects the necessary infrastructure to be ready to evacuate all the power supplied by Sapphire and subsequently through e mail dated November 12, 2013 it has also confirmed that Sapphire has been considered in stage 2 of its power evacuation plan. The Authority has decided that the applicant and the power purchaser should agree to a mutually acceptable date for the construction and completion of purchaser interconnection facilities. The power purchaser shall ensure that it will not be bearing the risk of payment against non-project missed volumes while agreeing to the aforesaid date and such costs, if





any, incurred against non-project missed volumes will not be allowed by the Authority. The energy purchase agreement, agreed between Saphire and power purchaser, shall also be submitted to the Authority for review.

5. Considering the application along with other relevant information and documents filed by Sapphire, the Authority has decided to grant upfront tariff to Sapphire. The Authority has also seen that on a tariff petition filed by Sapphire under rule 3 of the National Electric Power Regulatory Authority (Tariff Standards and Procedure) Rules, 1998, the Authority has already issued tariff determination on May 08, 2012, for proposed wind power generation project of 49.50 MW installed capacity of Sapphire, therefore, the Authority has decided that this decision on application opting for upfront tariff, will supersede the tariff determination of Sapphire dated May 08, 2012.

6. ORDER

In supersession of the determination of National Electric Power Regulatory Authority dated May 08, 2012, in the matter of tariff petition filed by Sapphire Wind Power Company Limited (the applicant), and exercise of powers under 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, 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	
	DIAD ATO 4				PKR/US \$	
Indevation	PKR/US \$ PK	PKR/US \$	PKR/US \$	PKR/US \$	&	
	& US CPI				LIBOR	

Levelized tariff discounted at 10% per annum works out to US cents 13.5244/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 upto 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
% of the prevalent tarif	plant capacity factor
75%	Above 31% to 32%
50%	Above 32% to 33%
25%	Above 33% to 34%
20%	Above 34% to 35%
10%	Above 35%

- 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 September 30, 2014. The up-front tariff granted to the applicant will no longer remain applicable/valid, if financial close is not achieved by the applicant by September 30, 2014 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 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 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 1st July, 1st October, 1st January and 1st 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

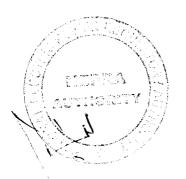
ER(REV)

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

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e) Indexations applicable to interest after achieving COD

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

Where:

I (FREV)

 The revised applicable interest tariff component indexed with 3 months LIBOR and exchange rate parity

 $I_{\,(\text{FREF})}$

 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 (FREF)

The base amount (as indicated in Annex –

 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/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 $\sqrt{|\cdot|}$





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 AEDB.
- The Energy Purchase Agreement should 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 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

(Habibullah Khilji)
Member

(Maj. (R) Haroon Rashid) Member

(Khawaja Muhammad Naeem) Vice Chairman



Sapphire Wind Power Company Limited Table for Base amount (Foreign Financing)

Relevant quarter	Base amount (in million US \$)
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,

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