



National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/TRF-188/FWEL-2011/14673-14675
October 27, 2016

Subject: **Decision of the Authority in the matter of Tariff Adjustment at Commercial Operations Date (COD) of Foundation Wind Energy-I (Pvt.) Ltd. (FWEL) (Case No. NEPRA/TRF-188/FWEL-2011)**

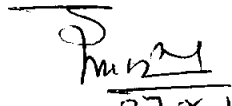
Dear Sir,

Please find enclosed herewith the subject Decision of the Authority along with Annexure-I, II-A & II-B (23 pages) in Case No. NEPRA/TRF-188/FWEL-2011.

2. The Decision is being intimated to the Federal Government for the purpose of notification in the official gazette pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.

3. The Order of the Authority along with revised Tariff Table (Annex-I) and Debt Servicing Schedules (Annex-II-A & II-B) needs to be notified in the official Gazette.

Enclosure: As above


(Syed Safeer Hussain)

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

CC:

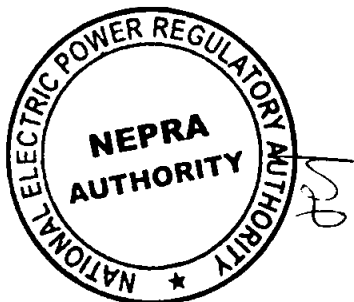
1. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad.
2. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad.



**DECISION OF THE AUTHORITY IN THE MATTER OF TARIFF ADJUSTMENTS AT
COMMERCIAL OPERATIONS DATE (COD) OF FOUNDATION WIND ENERGY-I (PVT)
LTD CASE NO. NEPRA/TRF-188/FWEL-I-2011**

1. Introduction

- 1.1 Pursuant to the tariff determination dated March 16, 2012 (hereinafter referred, to as the "Tariff Determination") of National Electric Power Regulatory Authority (hereinafter referred to as the "Authority") in the matter of Foundation Wind Energy-I (Private) Limited (hereinafter referred to as "FWEL-I" or the "Petitioner"), the reference tariff of FWEL-I has to be adjusted at the Commercial Operations Date (hereinafter referred to as "COD"). FWEL-I after having successfully commenced commercial operations with effect from April 11, 2015, filed a request vide letter no. PD-4716/BEL dated October 20, 2015 for adjustment in its reference tariff (hereinafter referred to as the "Request for COD Adjustment").
- 1.2 In support of its Request for COD Adjustment, various documents and information were submitted by the Petitioner for the consideration of the Authority which included copies of:
- Engineering, procurement and construction contracts
 - EPC invoices
 - Financing Agreements with the Banks / Lenders
 - Alternative Energy Development Board's letter No. B/3/1/BEL/07 dated July 18, 2013 regarding financial close.
 - National Transmission and Dispatch Company Limited's letter No. GM/CPPA/CE-II/MT-IV/FWEL-I/2742-64 dated June 03, 2015 regarding notification of COD of FWEL-I
 - Relevant bank statements
 - Payment challans of duties, pay orders through which these duties were paid and goods declarations at the time of import
 - Equity/debt draw-down schedules along with the bank statements
 - Insurance policies for construction and operations period along with their premium payment evidences
 - Other relevant source documents, information & related schedules



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1.3 After the review of the source documents and information submitted by FWEL-I, the Authority has decided to allow the following adjustments in the reference tariff of FWEL-I in view of the Request for COD Adjustment.

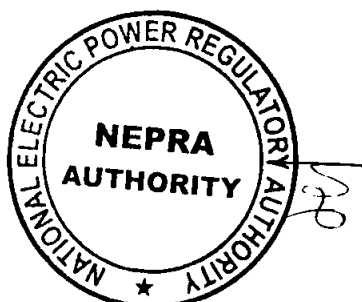
2. **Engineering, Procurement and Construction Cost (EPC Cost)**

2.1 The Authority had allowed EPC cost of US \$ 111.206 million (Rs.9,585.957 million) in the Tariff Determination. As per the Tariff Determination, the EPC contract cost has to be adjusted at COD on account of variation in US\$/PKR and Euro/PKR parity, on production of authentic documentary evidences to the satisfaction of the Authority.

2.2 FWEL-I has requested the Authority to allow the EPC cost of US \$ 110.335 million (Rs. 11,057.817 million) along with tariff adjustments for exchange rate at the COD stage. In support of its claim, FWEL-I has submitted copies of relevant documentary evidences including the contracts and particulars of payments made. The amounts claimed are as per the contracted amounts as allowed in the Tariff Determination. The claimed amount favorably vary with the amount of EPC offshore contract approved in the determination due to exchange rate parity between the currencies involved in conversion. The brief summary of the allowed EPC cost in comparison with the claimed cost is reflected below;

Description	As per Tariff Determination			Claimed at COD Stage		
	US \$ in millions	Reference exchange rate	Equivalent Rs. in millions	US \$ in millions	Exchange rate	Equivalent Rs. in millions
Off shore EPC contract price	83.595	86.20	7,205.889	82.723	100.81	8,339.404
On shore EPC contract price	27.611	86.20	2,380.068	27.611	98.45	2,718.413
Total	111.206	86.20	9,585.957	110.335	100.22	11,057.817

2.3 Based on the documentary evidences provided and verified, the Authority has decided to allow US \$ 82.666 million (Rs. 8,344.180 million) & US \$ 27.605 million (Rs. 2,722.592 million) as EPC offshore and onshore cost respectively.





3. Letter of Credit Charges

- 3.1 The Authority in the Tariff Determination had allowed US \$ 0.733 million (Rs 63.184 million) for the letter of credit charges. FWEL-I in its COD adjustment request has submitted that FWEL-I did not open any LC, as foreign portion of the debt was procured from Islamic development bank (IDB) & Asian Development Bank (ADB) which being development financial institutions do not issue letters of credit (LCs) like commercial banks. Therefore, FWEL-I has not claimed any expenditure on this account and accordingly no documents were submitted for approval or consideration by the Authority. In view of the foregoing the Authority has decided to exclude the cost earlier allowed in the Tariff Determination for this purpose.

4. Duties and Taxes

- 4.1 The Authority had allowed US \$ 0.711 million (Rs. 61.288 million) as duties and taxes in the Tariff Determination, adjustable in accordance with the mechanism as referred hereunder;

"Adjustment of duties and taxes on actual at COD stage, will be allowed for only those duties and taxes which are imposed on the petitioner. Adjustment of taxes/duties payable on fee/charges, etc of various third parties, not directly imposed on the petitioner will not be allowed."

- 4.2 The mechanism stipulated in order also referred;

"Duties and /or taxes, not being of refundable nature imposed on the petitioner upto the commencement of its commercial operations will be subject to adjustment at actual on COD, as against US\$ 0.711 million allowed now, upon production of verifiable documentary evidence to the satisfaction of the Authority".

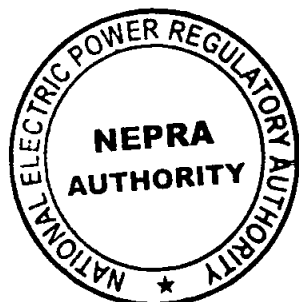
- 4.3 FWEL-I has claimed duties and taxes of Rs. 80.825 million at the COD stage and has provided following break-up of its claim:

S.No	Description	Rs. in Million
i.	Import stage surcharges / SIDS	68.078
ii.	Federal Insurance Fee(FIF)	1.200
iii.	Federal Excise Duty (FED)	10.547
iv.	Professional tax on paid up capital	1.000
Total		80.825





- 4.4 FWEL-I has claimed Rs. 10.547 million (US \$ 0.110 million) as Federal Excise Duty (FED) under the head of Duties/Taxes. FED was charged to the FWEL-I on various banking services. The Authority is of the view that Under section 2 (14) (c) read with section 7 of the Sales Tax Act, a registered person can claim input tax credit against his output tax liability in case of a valid sales tax invoice. The Authority on the claim deliberated and observed that FED is adjustable against the Sales Tax and the Petitioner can claim it as admissible input tax credit. Thus FED can't be considered among the duties and taxes which are neither adjustable nor refundable. It also noted that the Petitioner did not provide any evidence with regards to FED invoices of Bank and any related efforts or claim submitted for the adjustment of the same against its tax liability.
- 4.5 FWEL-I has also claimed professional tax of Rs 1.000 million (US \$ 0.01 million). The claimed amount includes Rs. 0.450 million (US \$ 0.004 million) pertaining to the penalty imposed for the FY 2007 to 2012 and professional tax of Rs. 0.550 million (US \$ 0.005 million) for the FY 2005 to 2014 paid in favor of Excise & Taxation officer. The Authority decided only to allow the professional tax Rs. 0.150 million (US \$ 0.002 million) as applicable and paid consistent to the construction period allowed i.e. from July 18, 2013 to January 18, 2015.
- 4.6 FWEL-I has also claimed Rs.1.200 million (US \$ 0.012 million) Federal Insurance Fee (FIF) as a part of duties and taxes. The Authority has decided to allow Federal Insurance Fee (FIF) for the allowed construction period as a part of insurance during construction consistent with the earlier decisions of the Authority.
- 4.7 The Authority has accordingly decided to allow the verified amount of Rs. 68.072 million (US \$ 0.688 million) as import stage surcharge (SIDS) and Rs. 0.150 million (US \$ 0.002 million) claimed on account of professional tax. The aggregate duties and taxes thus allowed by the Authority to FWEL-I cumulates to Rs. 68.222 million (US \$ 0.689 million).
5. Interest During Construction
- 5.1 FWEL-I was allowed interest during construction (hereinafter referred to as "IDC") of US \$ 5.335 million (Rs. 459.877 million) in the tariff determination. The adjustment mechanism given in the Tariff Determination is given below;



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"The Interest during construction will be adjusted at COD on the basis of actual debt draw downs (within the overall debt allowed by the Authority at COD), actual PKR/US\$ exchange rate variation for foreign loan denominated in US\$ and actual interest rates not exceeding the limit of 6 months KIBOR plus 2.95% for local financing and 6 months LIBOR per annum plus 4.50% for foreign financing, during the project construction period allowed by the Authority. Further the benefit of savings in spread on local financing of 0.20% per annum allowed, will be passed on to the petitioner."

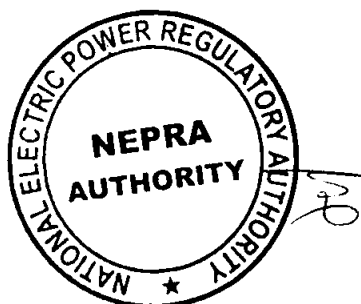
- 5.2 Further, the Authority in the Tariff Determination has allowed tariff adjustments at the COD for maximum project construction period of 18 months starting from construction start date stipulated in the EPA. FWEL-I has requested the Authority to allow IDC of US \$ 8.804 million (Rs. 897.00 million) for the entire project construction period i.e from construction start date till actual COD.
- 5.3 FWEL-I had entered into a Musharaka, financed equally by National Bank of Pakistan, Allied Bank Limited and Meezan Bank Limited for cumulative amount of Rs. 3,000 million. The interest has been computed on the basis of 6 months KIBOR plus 2.95% for local financing.
- 5.4 For foreign financing, as per Schedule I of the Common Terms Agreement, FWEL-I entered into Ijarah (a Shariah-compliant financing structure) with IDB for an amount of US \$ 66.86 million. This cumulative amount has been equally divided among Tranche A and Tranche B as per the financial structure reflected below:

Description	Terms with IDB	ADB Guarantee Fee
Trench A	6 months LIBOR + 4.60% markup	-
Trench B	6 months LIBOR + 0.35% markup	4.25%

FWEL-I has submitted copies of relevant documents including term agreements with the lenders, interest invoices, bank statements, bank advices, etc.

- 5.5 The Authority has observed that energy purchase agreement (hereinafter referred to as "EPA") of FWEL-I has defined construction start date as;

"The date of issuance of the "notice to commence" by the seller to the EPC Contractor and the release by the seller to the EPC Contractor of funds equaling in aggregate at least seven percent (7%) of the EPC Cost".





Accordingly construction start date of FWEL-I works out to be August 26, 2013.

- 5.6 The Authority also considered that EPA has defined required commercial operations date (hereinafter referred to as "RCOD") of FWEL-I as;

"The date that is eighteen (18) months following the date on which financial closing occurs, as such date may be extended pursuant to section 6.5, section 8.1(b), section 8.9 or by a reason of a force majeure event,...."

In view of the above, the Authority has noted that the financial close of FWEL-I was achieved on July 18, 2013, accordingly the RCOD with the approved construction period works out as January 18, 2015. The Authority has therefore decided to allow FWEL-I the IDC for the referred construction period from i.e. July 18, 2013 to January 18, 2015 (18 months).

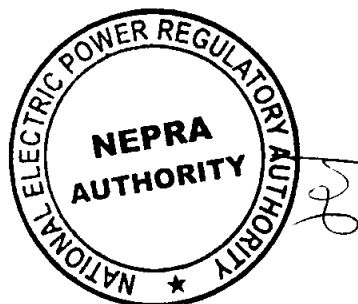
- 5.7 FWEL-I has received mark-up income after tax, amounting to US \$ 0.258 million (Rs. 27.265 million), attributable to the referred construction period allowed by the Authority. For consistent treatment, the Authority has netted off the IDC with the referred interest income.

- 5.8 Furthermore, the benefit of savings in spread on local financing of 0.20% per annum has also been allowed by the Authority as per mechanism provided in the Tariff Determination.

- 5.9 In the light of above prorating the amount of net IDC US \$ 7.337 million (Rs. 745.960 million) upto to the debt of US \$ 92.349 million (Rs. 9,236.358 million) allowed by the Authority at COD, the amount of IDC at the COD stage, works out to be US \$ 7.119 million (Rs. 723.851 million), which is hereby allowed by the Authority.

6. Financial Charges

- 6.1 The Authority had allowed US \$ 2.653 million (Rs. 228.688 million) as financial charges in the Tariff Determination, which was to be adjusted at COD upto the limit of 3% of total debt allowed (excluding the impact of IDC and financial charges).





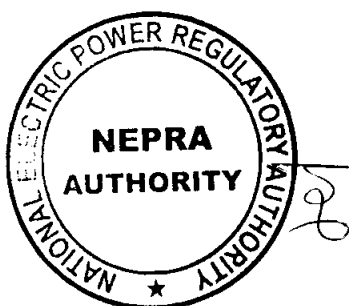
- 6.2 FWEL-I at COD stage has claimed US \$ 2.790 million (Rs.268.621 million) as financial charges and provided financing agreements along with invoices and payment evidences. Consistent to the tariff determination, the Authority has decided to allow financial charges of US \$ 2.604 million (Rs. 260.218 million) to FWEL-I upto the limit of 3% of total debt allowed (excluding the impact of IDC and financial charges) in the Tariff Determination.

7. Pre-COD Insurance Cost

- 7.1 The Authority had allowed US \$ 1.511 million (Rs. 130.248 million) on account of pre-COD insurance cost in its Tariff Determination. The Tariff Determination allowed adjustment of this cost at COD, on the basis of actual amount not exceeding 1.35% of EPC cost.
- 7.2 FWEL-I claimed actual paid insurance premium of US \$ 1.164 million (Rs. 117.635 million) as pre-COD insurance and submitted relevant documents and related evidences i.e. insurance policies, premium payment receipts, bank statement etc, in support thereof.
- 7.3 The Authority has decided to allow insurance cost during construction consistent with the allowed construction period of 18 months earlier approved i.e. from July 18, 2013 to January 18, 2015. Further, Federal Insurance Fee of US \$ 0.012 million (Rs. 1.200 million), as detailed in paragraph 4.6, after adjustment upto RCOD i.e. US \$ 0.010 million (Rs. 1.037 million) is classified as part of Insurance cost allowed during construction. Accordingly, the Authority has allowed cumulative insurance during construction of US \$ 1.039 million (Rs. 104.820 million) to FWEL-I.

8. Non-EPC and Project Development Costs

- 8.1 The Authority in the Tariff Determination had allowed cost of US \$ 1.000 million (Rs. 86.200 million) and US \$ 2.750 million (Rs. 237.050 million) on account of non-EPC and project development costs. Against the determined costs, FWEL-I claims an aggregate amount of US \$ 5.820 million (Rs. 494.683 million) on account of non-EPC and project development cost at the COD adjustment stage.





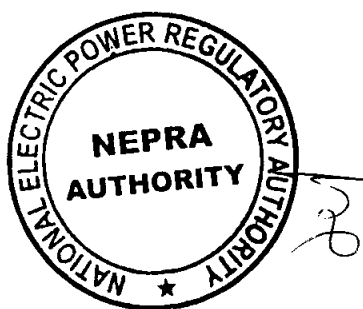
- 8.2 Consistent to earlier decisions, the Authority has decided to allow the claim of FWEL-I upto tariff determination limit. Further, the Authority has also decided to allow actual exchange rate variation to FWEL-I, for costs incurred in foreign currency. Accordingly a cumulative amount of US \$ 3.750 million (Rs. 325.457 million) on account of non-EPC & project development costs has been approved by the Authority.

9. Summary of Allowed Project Cost

- 9.1 The Authority had determined project cost of US \$ 125.899 million (Rs. 10,852.493 million) with necessary adjustments allowed at COD. FWEL-I claimed project cost of US \$ 129.921 million (Rs. 12,935.602 million) at the COD stage.
- 9.2 Based on decisions in the preceding paragraphs, the overall project cost allowed at COD adjustment stage to FWEL-I, works out to US \$ 125.474 million (Rs. 12,549.324 million) as summarized in table below;

Description	Approved	
	(US \$ in Million)	(PKR in Million)
EPC Cost	110.272	11,066.772
Duties and Taxes	0.689	68.222
Non-EPC Cost	3.750	325.457
Project Development Cost		
Financial Charges	2.604	260.218
Pre-COD Insurance	1.040	104.802
Interest During Construction	7.119	723.851
Total	125.474	12,549.324

- 9.3 The Authority had allowed the debt to equity ratio of 75:25 in the tariff determination. However at the time of COD, the actual debt equity ratio turns out to be 74:26. The Authority decided to allow and adjust the tariff on the basis of actual debt to equity composition at the time of COD.





10. Net Annual Benchmark Energy

- 10.1 FWEL-I has requested for correction of a mathematical/summation error in the benchmark energy production table. According to FWEL-I, the total of monthly benchmark energy table works out to be 144.6 GWh instead of 144.5 GWh as mentioned in the Tariff Determination as well as mentioned in the energy estimates confirmed by AEDB. Late on FWEL-I requested that the Authority may consider the benchmark energy estimates confirmed by AEDB instead of the calculation submitted in review motion and the same is accepted by the Authority.

11. Pre-COD Sale of Electricity

- 11.1 FWEL-I has claimed Rs. 22.159 million for export of 1,624 MWh electricity during the testing and grid energizing phase. The Authority in the tariff determination with respect to pre-COD provided that;

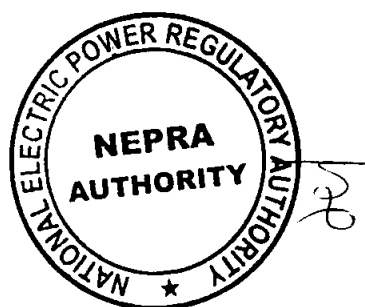
"The Authority has in earlier comparable determination allowed sale of electricity prior to COD pursuant to bilateral agreement on mutually agreed terms between the buyer and the seller. The Authority here by maintains its decision on this issue in the case of the petitioner. The mutually agreed tariff for COD sale of energy shall in no case be higher than the tariff determined by the Authority."

- 11.2 The Authority noted that it had already provided in the tariff determination the process and mechanism on any sales prior to COD and thus needs no further consideration.

12. O & M Costs

- 12.1 The O & M tariff components and their reference values allowed in the Tariff Determination were as follows:

Years	Local Rs/kWh.	Foreign Rs/kWh.
1 -2	0.2931	0.5719
3 -5	0.3108	1.2700
6 -10	0.3134	1.4166
11-20	0.2637	1.4663





	Index value	Month
Pakistani WPI (Manufactures)	209.470	July 2011
US CPI	226.889	Sept 2011
Exchange rate parity (PKR vs. US \$)	86.20	

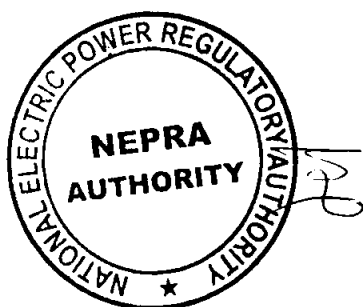
- 12.2 Based on indexation formulas allowed in the determination, and in the light of earlier decisions of the Authority issued vide No. NEPRA/TRF-90/FPCDL-2007/11019-11021 dated December 20, 2012 regarding replacement of WPI (Manufactures) with CPI – General, the O & M tariff components and their reference values, applicable to the units delivered, post COD, are as follows:

Years	Local Rs/kWh.	Foreign Rs/kWh.
1 -2	0.3728	0.6901
3-5	0.3953	1.5324
6-10	0.3986	1.7093
11-20	0.3354	1.7692

	Index value	Month
CPI –General	196.79	December 2014
US CPI	234.81	December 2014
Exchange rate parity (PKR vs. US \$)	100.50	As at RCOD Jan 18, 2015

13. Insurance During Operations

- 13.1 The Authority had allowed Rs.0.6634/kWh as insurance component to FWEL-I in the Tariff Determination. FWEL-I has requested to allow insurance component of Rs. 0.3810/kWh at the COD stage. As per the information submitted by FWEL-I, verified insurance cost for the first year of post COD operations works out to Rs. 47.555 million and insurance component of tariff turns out to be Rs. 0.3291/kWh. Consistent with the tariff determination, the Authority has decided to allow the same to FWEL-I and has also decided that for future, insurance will be adjusted annually, on the basis of actual expenditure, not exceeding 1.35% of the approved EPC cost, upon production of authentic documentary evidence by FWEL-I.





14. Return on Equity & Return on Equity during Construction

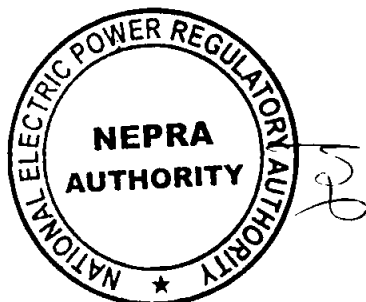
- 14.1 The Authority had allowed Rs. 3.1919/kWh as return on equity (hereinafter referred to as "ROE") tariff component to FWEL-I in the Tariff Determination. The Authority decided to allow same 17% ROE to FWEL-I as already been allowed so far to other wind power projects.
- 14.2 FWEL-I has requested to allow it ROE of Rs. 4.2638/kWh and return on equity during construction (hereinafter referred to as "ROEDC") of Rs 1.4511/kWh at the COD stage.
- 14.3 The ROE is subject to adjustment on the basis of actual amount of equity allowed by the Authority and variation in exchange rate parity between US \$/PKR. On the basis of revised equity and exchange rate of US\$/PKR of 100.50 the ROE component of tariff works out to Rs. 3.9165 per kWh which is accordingly allowed by the Authority.
- 14.4 Furthermore, based on (a) actual equity injections, (b) variation in exchange rate parity between US \$/PKR, (c) construction period allowed by the Authority, and (d) by prorating the ROEDC to the equity allowed by the Authority at COD i.e. US \$ 33.124 million (Rs. 3,312.966 million), ROEDC in the instant case works out to be US \$ 7.115 million (Rs. 715.061 million) with the resultant tariff component of Rs. 0.8793 /kWh, which is hereby allowed.

15. Withholding Tax

- 15.1 Based on the revised ROE and ROEDC, the tariff component of withholding tax has also been revised from Rs. 0.2673 /kWh to Rs. 0.3597 /kWh.

16. Debt Servicing Component

- 16.1 The Authority had assessed levelized debt servicing component of Rs. 6.1733 /kWh in the Tariff Determination. FWEL-I has now requested to allow it levelized debt servicing component of Rs. 6.8847 / kWh at the COD stage. The Tariff Determination provided that principal repayment and cost of debt to be adjusted at COD as per the actual borrowing composition within the parameters allowed. Further, the determination also stated that FWEL-I has procured local financing on the basis of



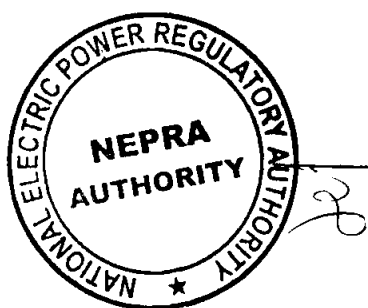


KIBOR plus 295 basis points. The determination specified that the benefit of 5 basis points (being lesser than 300 basis points allowed in similar projects) in the debt servicing cost is to be shared in a ratio of 60:40 between the power purchaser and FWEL-I respectively.

- 16.2 The Authority has noted that 40% share of FWEL-I in the saving of 5 basis point spread on debt i.e. difference between 3% benchmark spread and 2.95% actual spread on debt of FWEL-I, works out to be 0.02%. The Authority has accordingly allowed to add 0.02% to debt servicing cost of FWEL-I.
- 16.3 Based on the project cost of US \$ 125.474 million (Rs. 12,549.324 million) allowed at this stage by the Authority, debt as 74% of the referred project cost works out to be US \$ 92.349 (Rs. 9,236.358 million). Accordingly, the revised levelized foreign debt servicing component, on the basis of 6 months LIBOR of 0.33% + 4.50% margin works out to Rs. 4.0479/kWh and the revised levelized local debt servicing component on the basis of 6 months KIBOR of 9.63%+2.97% works out Rs. 2.5857/kWh, which is hereby allowed.

17. Order

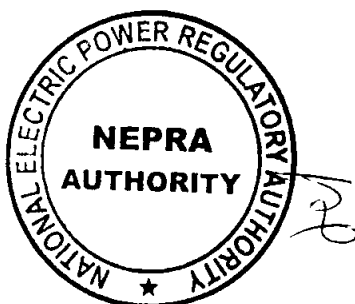
Pursuant to Rule 6 of the National Electric Power Regulatory Authority Licensing (Generation) Rules, 2000, read with Section 31(4) of Regulation of Generation Transmission and Distribution of Electric Power Act, 1997, Foundation Wind Energy-I (Private) Limited (the petitioner) is allowed to charge the following specified/approved tariff for delivery of electricity to the power purchaser:





Tariff Components	Year 1-2	Year 3-5	Year 6-10	Year 11-20	Indexation
	Rs./kwh.	Rs./kwh.	Rs./kwh.	Rs./kwh.	
Fixed O&M					
Local	0.3728	0.3953	0.3986	0.3354	CPI General
Foreign	0.6901	1.5324	1.7093	1.7692	PKR/US\$ & US CPI
Insurance	0.3291	0.3291	0.3291	0.3291	PKR/US\$
Return on equity	3.9165	3.9165	3.9165	3.9165	PKR/US\$
Return on equity during construction	0.8793	0.8793	0.8793	0.8793	PKR/US\$
Debt service (Local)	3.5825	3.5825	3.5825	-	KIBOR
Debt Service (Foreign)	5.6086	5.6086	5.6086	-	PKR/US\$ & LIBOR

- i) The reference tariff has been calculated on the basis of net annual benchmark energy generation of 144.500 GWh at annual net plant capacity factor of 32.99% for installed capacity of 50 MW.
- ii) The above charges will be limited to the extent of net annual energy generation of 144.500 GWh. Net annual generation supplied to the power purchaser in a year, in excess of benchmark energy of 144.500 GWh will be charged at 10% of the prevalent approved tariff.
- iii) In the above tariff no adjustment for carbon emission reduction receipts, has been accounted for. However, upon actual realization of carbon emission reduction receipts, the same shall be distributed between the power purchaser and the petitioner in accordance with the approved mechanism given in the GoP Policy for Development of Renewable Energy for Power Generation 2006, as amended from time to time.
- iv) The reference PKR/dollar rate has been assumed as Rs. 100.50/US\$ 1.



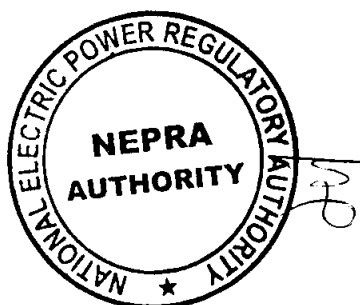


- v) The above tariff is applicable for a period of twenty (20) years commencing from the commercial operations date.
- vi) The monthly benchmark energy table along with monthly power curves should be verified by the Alternative Energy Development Board (AEDB)/power purchaser before finalization of energy purchase agreement.
- vii) The petitioner is entitled to payment of wind speed risk by the power purchaser in accordance with the GoP Policy for Development of Renewable Energy for Power Generation 2006, as amended from time to time and the mechanism approved by the AEDB.
- viii) The component wise tariff is indicated at Annex-I.
- ix) Debt Servicing Schedules are attached as Annex II-A and Annex II-B.

I. Pass-Through Items

No provision for income tax has been accounted for in the tariff. If any tax is imposed on the petitioner, the exact amount paid by the petitioner shall be reimbursed by the power purchaser to the petitioner on production of original receipts. This payment will be considered as a pass-through payment spread over a 12 months period. Furthermore, in such a scenario, the petitioner shall also submit to the power purchaser details of any tax shield savings and the power purchaser shall deduct the amount of these savings from its payment to the petitioner on account of taxation.

Withholding tax on dividends is also a pass through item just like other taxes as indicated in the government guidelines for determination of tariff for new IPPs. The power purchaser shall make payment on account of withholding tax at the time of actual payment of dividend, subject to maximum of 7.5% of 17% return on equity (including return on equity during construction). In case the petitioner 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



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so that the petitioner is able to recover the same as a pass through from the power purchaser in future on the basis of the total dividend payout.

II. Indexations:

The following indexation shall be applicable to the reference tariff:

i) Indexation applicable to O&M

The local part of O&M cost will be adjusted on account of local inflation and O&M foreign component will be adjusted on account of variation in dollar/rupee exchange rate and US CPI. Quarterly adjustments for inflation and exchange rate variation will be made on 1st July, 1st October, 1st January and 1st April respectively on the basis of latest available information with respect to CPI-General (notified by the Federal Bureau of Statistics)/alternative index determined by the Authority, US CPI (notified by US bureau of labor statistics) and revised TT & OD selling rate of US Dollar as notified by the National Bank of Pakistan. The mode of indexation will be as follows:

$$F O\&M_{(LREV)} = O\&M_{(LREF)} * CPI-G_{(REV)} / 196.790$$

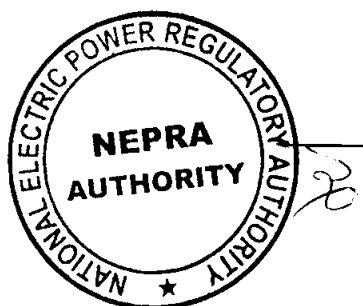
$$F O\&M_{(FREV)} = O\&M_{(FREF)} * US CPI_{(REV)} / 234.812 * ER_{(REV)} / 100.50$$

Where:

$F O\&M_{(LREV)}$ = The revised applicable fixed O&M local component of tariff

$F O\&M_{(FREV)}$ = The revised applicable fixed O&M foreign component of tariff indexed with US CPI and exchange rate variation

$O\&M_{(LREF)}$ = The reference fixed O&M local component of tariff for the relevant period





O&M (FREF)	=	The reference fixed O&M foreign component of tariff for the relevant period
CPI-G _(REV)	=	The Revised Consumer Price Index (General)
CPI-G _(REF)	=	196.790 Consumer Price Index (General) of December 2014 notified by the Pakistan Bureau of Statistics
US CPI _(REV)	=	The revised US CPI (all urban consumers)
US CPI _(REF)	=	234.812 US CPI (all urban consumers) for the month of December 2014 as notified by the US Bureau of Labor Statistics
ER _(REV)	=	the revised TT & OD selling rate of US dollar as notified by the National Bank of Pakistan

ii) Adjustment of insurance component

In case of insurance denominated in US \$, insurance cost component of tariff will be adjusted on account of US\$/PKR exchange rate variation on annual basis. Further, insurance component of the reference tariff will be adjusted as per actually incurred prudent costs, subject to maximum of 1.35% of the EPC cost, on annual basis upon production of authentic documentary evidence by the petitioner.

iii) Return on equity

The return on equity component of tariff will be adjusted on the basis of revised TT & OD selling rate of US Dollar as notified by the National Bank of Pakistan according to the following formula:

$$ROE_{(REV)} = ROE_{(REF)} \times ER_{(REV)} / ER_{(REF)}$$





Where:

$ROE_{(REV)}$ = Revised return on equity component of tariff
expressed in Rs/kWh.

$ROE_{(REF)}$ = Reference return on equity component of tariff
expressed in Rs/kWh.

$ER_{(REV)}$ = The revised TT & OD selling rate of US dollar as
notified by the National Bank of Pakistan

$ER_{(REF)}$ = The reference TT & OD selling rate of US dollar

iv) Return on equity during construction

The return on equity during construction component of tariff will be adjusted on the basis of revised TT & OD selling rate of US Dollar as notified by the National Bank of Pakistan according to the following formula:

$$ROEDC_{(REV)} = ROEDC_{(REF)} \times ER_{(REV)} / ER_{(REF)}$$

Where:

$ROEDC_{(REV)}$ = Revised return on equity during construction
component of tariff expressed in Rs/kWh.

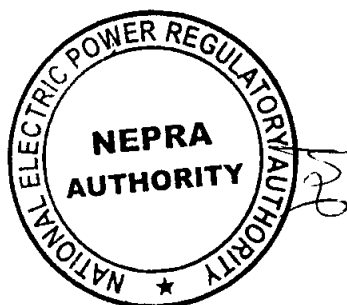
$ROEDC_{(REF)}$ = Reference return on equity during construction
component of tariff expressed in Rs/kWh.

$ER_{(REV)}$ = The revised TT & OD selling rate of US dollar as
notified by the National Bank of Pakistan

$ER_{(REF)}$ = The reference TT & OD selling rate of US dollar

v) Adjustment for LIBOR/KIBOR variation

The interest part of fixed charge component will remain unchanged throughout the term except for the adjustment due to variation in 6 months LIBOR/KIBOR, while





spread of 4.50% on 6 months LIBOR and 2.97% on 6 months KIBOR remaining the same, according to the following formula:

For local financing

$$\Delta I = P_{(REV)} * (KIBOR_{(REV)} - 9.63\%) / 2$$

Where:

ΔI = the variation in interest charges applicable corresponding to variation in 6 months KIBOR. ΔI can be positive or negative depending upon whether 6 months KIBOR_(Rev) per annum > or < 9.63%. The interest payment obligation will be enhanced or reduced to the extent of ΔI for each half year under adjustment.

$P_{(REV)}$ = is the outstanding principal (as indicated in the attached debt service schedule to this order at Annex-II-B) on a biannual basis at the relevant six monthly calculations date.

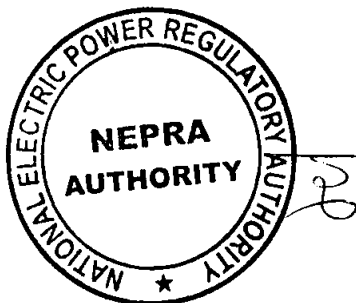
For foreign financing

$$\Delta I = P_{(REV)} * (LIBOR_{(REV)} - 0.33\%) / 2$$

Where:

ΔI = the variation in interest charges applicable corresponding to variation in 6 months LIBOR. ΔI can be positive or negative depending upon whether 6 months LIBOR_(Rev) per annum > or < 0.33%. The interest payment obligation will be enhanced or reduced to the extent of ΔI for each half year under adjustment.

$P_{(REV)}$ = is the outstanding principal (as indicated in the attached debt service schedule to this order at Annex-II-A) on a biannual basis at the relevant six monthly calculations date.





Foreign debt and its interest will also be adjusted on bi-annual basis on account of actual variation in PKR/US \$ over the applicable reference exchange rate.

Note:

Adjustments on account of inflation, foreign exchange rate variation, LIBOR/KIBOR variation and actual insurance will be approved and announced by the Authority within fifteen working days after receipt of the petitioner's request for adjustment in tariff in accordance with the requisite indexation mechanism stipulated herein.

III. Terms and Conditions of Tariff:

Wind Power Plant's Performance Data:

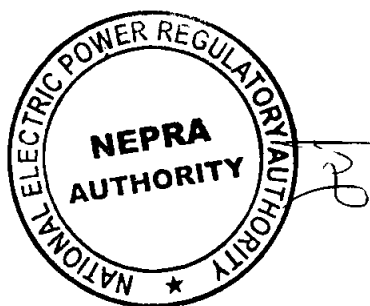
The petitioner shall install monitoring masts with properly calibrated automatic computerized wind speed recording meters at the same height as that of the wind turbine generators and a compatible communication/SCADA system both at the wind farm and power purchaser's control room for transmission of wind speed and power output data to the power purchaser's control room.

Emissions Trading/ Carbon Credits:

The petitioner shall process and obtain emissions/carbon credits expeditiously and credit the proceeds to the power purchaser as per the GoP Policy for Development of Renewable Energy for Power Generation 2006, as amended from time.

Other:

The Authority has allowed/approved only those cost(s), term(s), condition(s), provision(s), etc. which have been specifically approved in this tariff determination. Any cost(s), term(s), condition(s), provision(s), etc. contained in the tariff petition or any other document which is not specifically allowed/approved in this tariff determination should not be implied to be approved, if not adjudicated upon in this tariff determination.



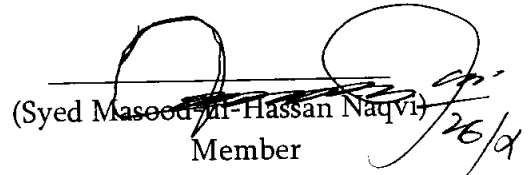


- IV. The order along with, revised tariff table and debt servicing schedules as attached thereto are recommended for notification by the Federal Government in the official gazette in accordance with Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.

AUTHORITY



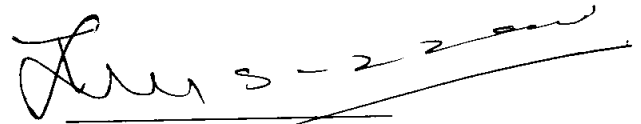
(Maj. (R) Haroon Rashid)
Member



(Syed Masood Ali-Hassan Naqvi)
Member

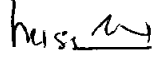


(Himayat Ullah Khan)
Member/VC



(Brig. (R) Tariq Saddozai)
Chairman




27.X.16

FOUNDATION WIND ENERGY - I (PRIVATE) LIMITED
REFERENCE TARIFF TABLE

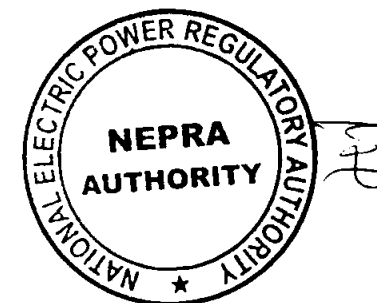
Annex - I

Year	O&M		Insurance	ROE	ROEDC	Withholding tax @7.5%	Loan repayment	Interest charges	Tariff
	Local	Foreign							
	Rs. / kWh	Rs. / kWh							
1	0.3728	0.6901	0.3291	3.9165	0.8793	0.3597	4.6122	4.5789	15.7386
2	0.3728	0.6901	0.3291	3.9165	0.8793	0.3597	4.9259	4.2653	15.7386
3	0.3953	1.5324	0.3291	3.9165	0.8793	0.3597	5.2663	3.9249	16.6035
4	0.3953	1.5324	0.3291	3.9165	0.8793	0.3597	5.6363	3.5548	16.6035
5	0.3953	1.5324	0.3291	3.9165	0.8793	0.3597	6.0391	3.1521	16.6035
6	0.3986	1.7093	0.3291	3.9165	0.8793	0.3597	6.4780	2.7131	16.7836
7	0.3986	1.7093	0.3291	3.9165	0.8793	0.3597	6.9572	2.2339	16.7836
8	0.3986	1.7093	0.3291	3.9165	0.8793	0.3597	7.4809	1.7102	16.7836
9	0.3986	1.7093	0.3291	3.9165	0.8793	0.3597	8.0541	1.1371	16.7836
10	0.3986	1.7093	0.3291	3.9165	0.8793	0.3597	8.6823	0.5089	16.7836
11	0.3354	1.7692	0.3291	3.9165	0.8793	0.3597	-	-	7.5893
12	0.3354	1.7692	0.3291	3.9165	0.8793	0.3597	-	-	7.5893
13	0.3354	1.7692	0.3291	3.9165	0.8793	0.3597	-	-	7.5893
14	0.3354	1.7692	0.3291	3.9165	0.8793	0.3597	-	-	7.5893
15	0.3354	1.7692	0.3291	3.9165	0.8793	0.3597	-	-	7.5893
16	0.3354	1.7692	0.3291	3.9165	0.8793	0.3597	-	-	7.5893
17	0.3354	1.7692	0.3291	3.9165	0.8793	0.3597	-	-	7.5893
18	0.3354	1.7692	0.3291	3.9165	0.8793	0.3597	-	-	7.5893
19	0.3354	1.7692	0.3291	3.9165	0.8793	0.3597	-	-	7.5893
20	0.3354	1.7692	0.3291	3.9165	0.8793	0.3597	-	-	7.5893
Levelized	0.3750	1.4755	0.3291	3.9165	0.8793	0.3597	4.3812	2.2524	13.9687

The reference tariff has been calculated on the basis of net annual benchmark energy generation of 144.500GWh. Net annual generation supplied to the power purchaser in a year, in excess of benchmark energy of 144.500 GWh will be charged at 10% of the prevalent approved tariff.

Exchange rate 1 US \$ = 100.5 PKR

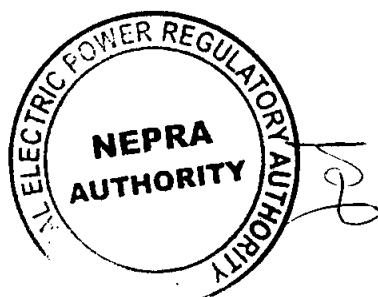
Levelized tariff @ 10% works out to be US cents 13.8992

FOUNDATION WIND ENERGY - II (PRIVATE) LIMITED **DEBT SERVICING SCHEDULE**

LIBOR 0.33%
Spread 4.50%
Effective 4.83%
Interest rate

Period	Foreign Debt					Annual Principal Repayment Rs./kWh	Annual Interest Rs./kWh	Annual Debt Servicing Rs./kWh
	Principal Million Rs	Repayment Million Rs	Interest Million Rs	Balance Million Rs	Total Debt Service Million Rs			
1	6,369.22	251.53	153.70	6,117.69	405.22			
	6,117.69	257.59	147.63	5,860.10	405.22			
	6,369.22	509.12	301.32	5,860.10	810.44	3.5233	2.0853	5.6086
	5,860.10	263.81	141.41	5,596.29	405.22			
	5,596.29	270.18	135.04	5,326.11	405.22			
2	5,860.10	533.99	276.45	5,326.11	810.44	3.6954	1.9132	5.6086
	5,326.11	276.70	128.52	5,049.41	405.22			
	5,049.41	283.37	121.85	4,766.04	405.22			
3	5,326.11	560.07	250.37	4,766.04	810.44	3.8759	1.7327	5.6086
	4,766.04	290.21	115.01	4,475.83	405.22			
	4,475.83	297.21	108.01	4,178.61	405.22			
4	4,766.04	587.43	223.02	4,178.61	810.44	4.0652	1.5434	5.6086
	4,178.61	304.39	100.83	3,874.23	405.22			
	3,874.23	311.73	93.49	3,562.50	405.22			
5	4,178.61	616.12	194.32	3,562.50	810.44	4.2638	1.3448	5.6086
	3,562.50	319.25	85.97	3,243.24	405.22			
	3,243.24	326.96	78.26	2,916.28	405.22			
6	3,562.50	646.21	164.23	2,916.28	810.44	4.4721	1.1365	5.6086
	2,916.28	334.85	70.37	2,581.44	405.22			
	2,581.44	342.93	62.29	2,238.51	405.22			
7	2,916.28	677.78	132.67	2,238.51	810.44	4.6905	0.9181	5.6086
	2,238.51	351.20	54.02	1,887.30	405.22			
	1,887.30	359.68	45.54	1,527.63	405.22			
8	2,238.51	710.88	99.56	1,527.63	810.44	4.9196	0.6890	5.6086
	1,527.63	368.36	36.86	1,159.27	405.22			
	1,159.27	377.25	27.97	782.02	405.22			
9	1,527.63	745.60	64.84	782.02	810.44	5.1599	0.4487	5.6086
	782.02	386.35	18.87	395.67	405.22			
	395.67	395.67	9.55	0.00	405.22			
10	810.44	782.02	28.42	28.42	810.44	5.4119	0.1967	5.6086



FOUNDATION WIND ENERGY - II (PRIVATE) LIMITED **DEBT SERVICING SCHEDULE**

KIBOR 9.63%
Spread 2.97%
Effective interest rate 12.60%

Period	Local Debt					Annual Principal Repayment Rs./kWh	Annual Interest Rs./kWh	Annual Debt Servicing Rs./kWh
	Principal Million Rs	Repayment Million Rs	Interest Million Rs	Balance Million Rs	Total Debt Service Million Rs			
1	2,897.89	76.27	182.57	2,821.62	258.84	1.0889	2.4936	3.5825
	2,821.62	81.08	177.76	2,740.54	258.84			
	2,897.89	157.35	360.33	2,740.54	517.68			
	2,740.54	86.18	172.65	2,654.36	258.84			
2	2,654.36	91.61	167.22	2,562.74	258.84	1.2304	2.3521	3.5825
	2,740.54	177.80	339.88	2,562.74	517.68			
	2,562.74	97.39	161.45	2,465.36	258.84			
	2,465.36	103.52	155.32	2,361.83	258.84			
3	2,562.74	200.91	316.77	2,361.83	517.68	1.3904	2.1922	3.5825
	2,361.83	110.04	148.80	2,251.79	258.84			
	2,251.79	116.98	141.86	2,134.82	258.84			
	2,361.83	227.02	290.66	2,134.82	517.68			
4	2,134.82	124.35	134.49	2,010.47	258.84	1.5711	2.0115	3.5825
	2,010.47	132.18	126.66	1,878.29	258.84			
	2,134.82	256.53	261.15	1,878.29	517.68			
	1,878.29	140.51	118.33	1,737.78	258.84			
5	1,737.78	149.36	109.48	1,588.42	258.84	1.7753	1.8073	3.5825
	1,878.29	289.87	227.81	1,588.42	517.68			
	1,588.42	158.77	100.07	1,429.66	258.84			
	1,429.66	168.77	90.07	1,260.89	258.84			
6	1,588.42	327.54	190.14	1,260.89	517.68	2.2667	1.3158	3.5825
	1,260.89	179.40	79.44	1,081.48	258.84			
	1,081.48	190.71	68.13	890.78	258.84			
	1,260.89	370.11	147.57	890.78	517.68			
7	890.78	202.72	56.12	688.06	258.84	2.5613	1.0212	3.5825
	688.06	215.49	43.35	472.57	258.84			
	890.78	418.21	99.47	472.57	517.68			
	472.57	229.07	29.77	243.50	258.84			
8	243.50	243.50	15.34	(0.00)	258.84	2.8942	0.6883	3.5825
	517.68	472.57	45.11	45.11	517.68			
10						3.2704	0.3122	3.5825

