

National Electric Power Regulatory Authority Islamic Republic of Pakistan

NEPRA Tower, Ataturk Avenue(East), G-5/1, Islamabad Ph: +92-51-9206500, Fax: +92-51-2600026 Web: www.nepra.org.pk, E-mail: registrar@nepra.org.pk

No. NEPRA/R/TRF-156/FFCEL-2014/14119-14121 November 10, 2014

(Syed Safeer Hussain)

Subject: Decision of the National Electric Power Regulatory Authority in the Matter of Tariff Adjustment at Commercial Operations Date of FFC Energy Ltd. [Case # NEPRA/TRF-156/FFCEL-2014]

Dear Sir,

Please find enclosed herewith the subject Decision of the Authority along with Annexure-I, II & III (23 pages) in Case No. NEPRA/TRF-156/FFCEL-2014.

2. The Decision is being intimated to the Federal Government for the purpose of notification of the approved tariff in the official gazette pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997) and Rule 16(11) of the National Electric Power Regulatory Authority Tariff (Standards and Procedure) Rules, 1998.

3. Please note that only Order of the Authority at Para 16 of the Decision along with Annexure-I, II & III needs to be notified in the official Gazette.

Enclosure: As above

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

CC:

1. Secretary, Cabinet Division, Cabinet Block, Islamabad.

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



DECISION OF THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY IN THE MATTER OF TARIFF ADJUSTMENTS AT COMMERCIAL OPERATIONS DATE OF FFC ENERGY LIMITED

1. Introduction

- 1.1 Pursuant to tariff determination of National Electric Power Regulatory Authority (hereinafter referred to as the "Authority") in the matter of FFC Energy Limited (hereinafter referred to as "FFC") dated August 10, 2010, clarifications on abovementioned determination and amended order of the Authority issued on November 03, 2010 (hereinafter collectively referred to as the "determination") the reference tariff of FFC was required to be adjusted at the commercial operations date (hereinafter referred to as "COD"). FFC having successfully commenced commercial operations with effect from May 16, 2013, filed a request vide letter dated September 17, 2013 for adjustment in its reference tariff, in accordance with the determination.
- 1.2 The Authority vide letter no. NEPRA/R/TRF-156/12634 dated November 08, 2013 directed FFC to submit an audit report from an independent auditor, to be selected from A category of penal of approved auditors of State Bank of Pakistan, regarding the authenticity of the tariff adjustments claimed in accordance with the tariff determination. FFC appointed KPMG Taseer Hadi & Co., Chartered Accountants (hereinafter referred to as "KPMG") for the aforesaid assignment and submitted report of KPMG for consideration of the Authority. Contents of report of KPMG have been considered by the Authority and where considered necessary have been discussed in relevant portions of this decision.
- 1.3 Copies of the following documents were submitted by FFC, in support of its request for adjustment in reference tariff at COD:
 - Engineering, procurement and construction contracts
 - Agreements with the banks
 - Certificate of commissioning of the complex from TUV NORD Iran dated May 15, 2013





- Letter no. GM/CPPA/CE-II/MT-IV/FFCL/6579-6600 dated June 12, 2013 of National Transmission and Despatch Company Limited regarding notification of COD of FFC
- Financial statements for the period ended June 30, 2013 duly reviewed by KPMG
- Report of KPMG dated January 22, 2014, to the board of directors of FFC, in respect of company's true up tariff petition
- Letter no. I-368-2014 dated February 10, 2014 of KPMG regarding its above mentioned report and letter dated July 23, 2014 of KPMG
- Relevant bank statements and advices
- EPC invoices
- Payment challans of duties, pay orders through which these duties were paid and goods declarations
- Equity/debt draw downs schedules reconciled with the bank statements
- Other relevant source documents and related schedules
- 1.4 After scrutiny of the documents/information submitted by FFC, the Authority has decided to allow following adjustments in the reference tariff of FFC:

2. Engineering, Procurement and Construction Cost As Per Contracts

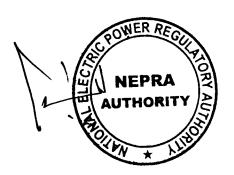
- 2.1 The Authority had assessed cost of engineering, procurement and construction (hereinafter referred to as "EPC") contracts of US \$ 111.199 million in the determination. The reference exchange rate parity in the determination for Rs. vs. US\$ was 85. The determination specified that specific items of project cost to be paid in foreign currency (i.e. US\$) shall be adjusted at COD with PKR/US\$ exchange rate based on actual date of transaction on production of verifiable documentary evidence by FFC.
- 2.2 FFC has requested the Authority to allow it EPC cost of US \$ 111.199 million (Rs. 10,010.647 million) while allowing tariff adjustments at the COD stage and in support of its claim has submitted copies of relevant documentary evidences. A comparison of EPC contracts cost allowed in the determination and claimed by FFC is as follows:





	As per determination	FFC claim	
	<u>US \$ in millions</u>	US \$ in millions	
EPC contracts cost:			
Off shore	87.531	86.131	
On shore	23.668	25.068	
	111.199	111.199	

- 2.3 On an inquiry, FFC has clarified that upon commencement of work, on the request of EPC contractor, the EPC offshore contract price was reduced by US \$ 1.400 million and the EPC onshore contract price was correspondingly increased by US \$ 1.400 million. The Authority observed that the aforementioned adjustment between EPC offshore contract price and EPC onshore contract price does not increase the tariff, therefore it has decided to allow the same.
- The Authority also observed that KPMG in their report to the board of directors of FFC dated January 22, 2014 have expressed an unqualified opinion regarding EPC contracts cost claim of FFC. However, in the reconciliation of duties and taxes paid by FFC on imported plant and equipment, annexed to the report of KPMG, material amounts have been indicated which were not subjected to duties and taxes.
- 2.5 The Authority after due consideration of the available information, required FFC vide letter no. NEPRA/R/TRF-156/8077 dated July 10, 2014 to provide an opinion from KPMG, regarding the nature and correctness of each of the reconciling items, in the reconciliation of duties and taxes with the value of goods imported, and to provide a certificate from KPMG certifying that:
 - The claimed EPC contracts cost of US \$ 111.199 million has been actually incurred and is true and correct.
 - All the off shore plant, machinery and equipment as per the EPC contracts have been imported and the import thereof is duly reconciled with the import





documents.

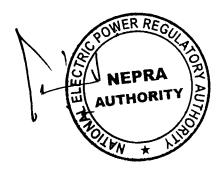
2.6 In response FFC submitted letter of KPMG dated July 23, 2014, addressed to the board of directors of FFC. An extract from this letter reads as follows:

"Through this letter, we reconfirm that;

- i. The aggregate EPC contract price amounting to US \$ 111.199, equivalent to PKR 9,982.137 million, claimed by the Company has been paid to the EPC contractors for the design, engineering, procurement, erection, commissioning, testing and construction of the project, and the said costs, are true and correct.
- ii. The plant, machinery and equipment along with payments made to the offshore contractors were reconciled with the related import documents and were found in order.

The Authority found that according to the reconciliation of EPC contracts value with value used for duties and taxes, annexed to the aforesaid letter, against the EPC offshore contract cost claim of US \$ 86.131 million, total value of invoices against which import duties have been claimed are US \$ 64.290 million.

- 2.7 The Authority for reaching at a just and informed decision required FFC vide letter no. NEPRA/R/TRF-156/10553 dated September 12, 2014 to give a presentation, along with KPMG, regarding the reconciliation of duties and taxes with the claimed EPC contracts cost. The aforesaid presentation was given by FFC on September 23, 2014 wherein FFC submitted that the EPC contracts cost claimed is true and correct. KPMG also supported the submissions of FFC regarding the correctness of EPC contracts cost claimed. It was submitted that payments not made for goods do not appear in the customs documents.
- 2.8 The Authority after thorough deliberation, considering the submissions of KPMG and availability of documentary evidences, have decided to allow EPC contracts cost of US \$ 111.199 million to FFC, as claimed by them. The Authority however noted that





compliance by FFC with the taxation laws of Pakistan needs to be scrutinised by the Federal Board of Revenue.

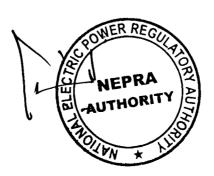
2.9 The Authority has observed that for the purposes of adjustment of EPC contracts cost, actual weighted average Rs. / US \$ parity works out to 89.77. Accordingly, in view of the discussions above, after allowing exchange rates fluctuations, the EPC contracts cost of FFC works out to Rs. 9,982.137 million (US \$ 111.199 million) which is hereby allowed.

3. <u>Letter Of Credit Opening And Confirmation Charges</u>

3.1 The Authority in the determination had allowed US \$ 1.250 million to FFC for the letter of credit opening and confirmation charges. FFC has claimed Rs. 32.539 million (US \$ 0.367 million) under this cost head. KPMG in their report to the board of directors of FFC dated January 22, 2014 have expressed an unqualified opinion regarding letter of credit opening and confirmation charges claim of FFC. The Authority has decided to restrict letter of credit opening and confirmation charges upto RCOD, accordingly Rs. 31.341 million (US \$ 0.355 million) pertaining to the construction period allowed by the Authority, being verifiable are hereby allowed.

4. Duties And Taxes

- 4.1 The Authority had assessed US \$ 0.693 million as duties and taxes in the determination. The determination specified that customs duties and other taxes shall be adjusted as per actual at COD, based on verifiable documentary evidence. FFC has claimed Rs. 84.064 million (US \$ 0.959 million) as duties and taxes at the COD stage. In support of its claim, FFC submitted copies of goods declarations, payment challans of duties, pay orders of different banks through which duties were paid, commercial invoices, etc.
- 4.2 The Authority observed that FFC has claimed Rs. 32.086 million Federal Excise Duty (hereinafter referred to as "FED") as a part of duties and taxes and in support of its claim has also provided advice of KPMG rendered to them. KMPG in their aforesaid advice have stated that they understand that banking companies have charged FED to FFC against services rendered on account of letter of credit commission, remittance of



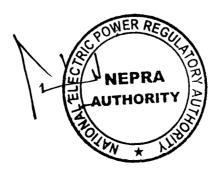


funds, arrangement fee, security trustee fee, monitoring fee and other services during the financial years 2010, 2011, 2012 and the banking companies did not issue sales tax FED invoices against the FED charged. KMPG have stated in their advice that in case a company holds a valid sales tax invoice from the banks then it can claim the sales tax paid against the banking services. Further, a company can also claim sales tax charged by the banking companies under the Sind Sales Tax Act as admissible input tax credit. KPMG have also stated in their advice that "......... regarding the marketing practices, we are again given to understand that the banks are issuing sales tax invoices on demand by their customers." FFC in support of its claim also submitted a letter of MCB Bank Limited dated March 10, 2014 stating that MCB Bank Limited has charged FED on invoices billed to FFC in lieu of services provided, however, it did not issue any sales tax invoice as it was not required to issue such invoices in 2010. The Authority has considered the issue and has observed that FED was refundable in nature and has therefore decided not to allow FED of Rs. 32.086 million claimed by FFC.

- 4.3 The Authority has also decided not to allow Rs. 0.590 million sales tax claimed by FFC, as a part of duties and taxes, since the sales tax claimed is of a refundable nature.
- 4.4 FFC has also claimed Rs. 1.367 million Federal Insurance Fee as a part of duties and taxes. The Authority has decided to allow Federal Insurance Fee as a part of insurance during construction in accordance with the established practice.
- 4.5 The aggregate duties and taxes allowed by the Authority to FFC accordingly work out to Rs. 50.020 million (US \$ 0.558 million).

5. <u>Interest During Construction</u>

5.1 FFC was allowed interest during construction (hereinafter referred to as "IDC") of US \$ 11.922 million in the determination which was subject to adjustment at the COD. FFC has requested the Authority to allow it IDC of Rs. 1,701.240 million (US \$ 17.785 million) at the COD stage and has submitted copies of term agreements with the lenders, bank statements, bank advices, etc. to substantiate its claim of IDC.





The Authority has observed that energy purchase agreement (hereinafter referred to as "EPA") of FFC defines construction start date as follows:

"Construction Start Date - 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".

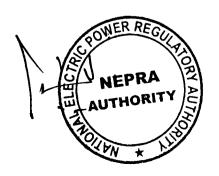
The Authority has observed that as per the above definition construction start date of FFC works out to be June 28, 2011.

5.3 The Authority has also noted that EPA of FFC, defines its required commercial operations date (hereinafter referred to as "RCOD") as follows:

"Required Commercial Operations Date - The date that is nineteen (19) 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, any breach or default by the GOP of the Implementation Agreement, any breach or default by AEDB under the Site Sub-lease and / or any Non- Project Event."

The Authority has noted that financial close of FFC was achieved on June 28, 2011, accordingly its RCOD works out to January 29, 2013. The Authority has therefore decided to allow FFC IDC from June 28, 2011 to January 28, 2013.

- 5.4 The Authority furthermore observed that FFC has earned mark-up income amounting to Rs. 13.653 million which is attributable to the construction period allowed by the Authority. For fair and consistent treatment, the Authority has decided to deduct this income from IDC.
- 5.5 The Authority has also found that the schedule of total project cost audited by KPMG states that IDC if calculated up to January 28, 2013 (RCOD as per the EPA) amounts to Rs. 1,352.766 million (US \$ 14.229 million). The Authority has noted that KPMG in working of the aforesaid amount, have not restricted interest income to construction period as per EPA, have deducted interest income net of tax from IDC, etc.





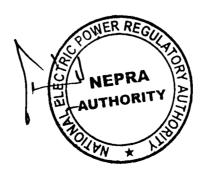
In the light of discussion in the preceding paragraphs, and prorating the amount of IDC incurred on debt of Rs. 9,753.000 million by FFC, on the basis of debt of Rs. 9,669.296 million allowed by the Authority, the amount of IDC at the COD stage, works out to Rs. 1,344.757 million (US \$ 13.675 million), which is hereby allowed.

6. <u>Financial Charges</u>

6.1 The Authority had assessed US \$ 3.102 million as financial charges in the determination. FFC has claimed Rs. 263.995 million (US \$ 3.113 million) as financial charges at the COD stage. The Authority has noted that financial charges have been allowed upto the limit of 3% of total debt, excluding impact of IDC and financial charges to other comparable IPPs. The Authority has therefore decided to allow financial charges of Rs. 251.762 million (US \$ 2.808 million) to FFC.

7. <u>Insurance During Construction</u>

- 7.1 The Authority had assessed US \$ 1.518 million as insurance during construction in the determination. The determination allowed adjustment of this cost at COD, on the basis of actual not exceeding 1.35% of EPC cost.
- 7.2 FFC has claimed Rs. 132.018 million (US \$ 1.433 million) as insurance during construction and has submitted relevant details and supporting documents.
- 7.3 The Authority has observed that insurance of Rs. 16.312 million does not pertain to the construction period allowed by the Authority. The Authority has decided to restrict insurance during construction to the extent of cost pertaining to the construction period allowed by the Authority. Further, federal insurance fee of Rs. 1.367 million, as detailed in paragraph 4.4, after adjustment upto RCOD i.e. Rs. 1.227 million, needs to be classified as insurance during construction. Based on the documentary evidence, and in line with decisions enumerated above, the insurance during construction of Rs. 116.933 million (US \$ 1.350 million) is allowed to FFC.



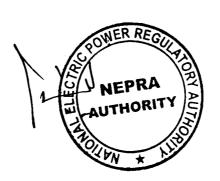


8. Non-EPC and Project Development Costs

- 8.1 The Authority had allowed aggregate cost of US \$ 3.873 million on account of non-EPC and project development costs in the determination. Against these costs FFC claimed an aggregate amount of Rs. 352.762 million at the COD stage, which was subsequently revised to Rs.318.613 million (US \$ 3.599 million). The revised claim was also verified by the Auditors.
- 8.2 The Authority has noted that FFC has claimed land lease cost of Rs. 9.484 million as a part of non-EPC and project development costs. The Authority observed that although this cost was not earlier allowed to FFC in the determination, however keeping in view the fact that the claimed cost is verifiable and claim of FFC is within the overall limit for non-EPC and project development costs allowed, the Authority has decided to allow this cost pertaining to the construction period allowed by the Authority. Land lease cost of Rs. 0.769 million, not pertaining to the construction period allowed by the Authority, has been deducted from Non-EPC and project development costs claim of FFC.
- 8.3 The Authority has also noted that FFC has claimed Rs. 8.175 million on account of deductible portion of the insurance claim on account of blade damage. The Authority noted that it cannot allow losses of such nature to be passed on to the end consumers through tariff. The Authority has therefore decided to disallow aforementioned Rs. 8.175 million claimed by FFC.
- 8.4 In accordance with the decisions enumerated above, the aggregate non-EPC and project development costs allowed to FFC work out to Rs. 309.669 million (US \$ 3.556 million).

9. Summary of Adjustments in Project Cost

9.1 The Authority had originally determined project cost of US \$ 133.557 million. FFC has claimed project cost of Rs. 12,543.116 million (US \$ 138.455 million) at the COD stage. Based on decisions in the preceding paragraphs, the overall project cost allowed to FFC, works out to Rs. 12,086.620 million (US \$ 133.502 million).





9.2 The Authority has noted that debt equity ratio of FFC at RCOD was 80 : 20 which is the same as considered in the determination. The Authority has accordingly decided to allow debt equity ratio of 80 : 20 to FFC.

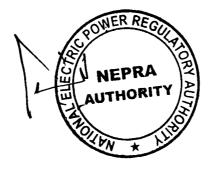
10. Net Annual Benchmark Energy

- 10.1 FFC has requested for correction of a mathematical/summation error in the benchmark energy production table attached with the determination. According to FFC, the total of monthly benchmark energy as per the aforesaid table works out to 143.5 GWh. which has been incorrectly mentioned as 143.6 GWh in the benchmark energy production table.
- 10.2 The Authority has noted that net annual benchmark energy for wind power generation projects in Pakistan is normally fixed on the basis of energy estimates worked out by the Alternative Energy Development Board. However, in this case FFC requested the Authority to consider its estimates for fixation of net annual benchmark energy, which was accepted by the Authority. The Authority has found that FFC is claiming the impact of rounding of net annual benchmark energy to one decimal place as an error. The correct net annual benchmark energy up to three decimal places, as claimed by FFC, works out to 143.559 GWh. as detailed in Annex -I. The Authority has decided to consider the net annual benchmark energy of FFC to three decimal points for accurate tariff computations.

11. O & M Costs

11.1 The O & M tariff components and their reference values allowed in the determination were as follows:

Years	Local Rs/kWh.	Foreign Rs/kWh.
1 -2	0.4504	0.1930
3 -5	0.9791	0.4196
6 -20	0.7678	0.3290





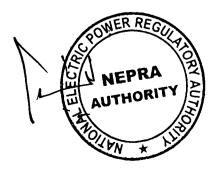
	Index value	Month
WPI (Manufactures)	168.82	June 2010
US CPI	217.965	June 2010
Exchange rate parity (PKR vs. US \$)	85	

Based on indexation formulas allowed in the determination, and in the light of earlier decisions of the Authority, regarding replacement of WPI (Manufactures) with CPI - General and adjustment due to consideration of net annual benchmark energy up to three decimal points, 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	0.6244	0.2335	
3 -5	1.3574	0.5077	
6 -20	1.0644	0.3981	
	Index value	Month	
CPI - General	172.82	December 2012	
US CPI	229.601	December 2012	
Exchange rate parity (PKR vs. US \$)	97.60		

12. <u>Insurance During Operations</u>

The Authority had allowed Rs. 0.6582 per kWh as insurance tariff component to FFC in the determination. FFC has requested to allow it insurance tariff component of Rs. 0.6587 per kWh at the COD stage. According to the information submitted by FFC, its insurance cost for the first year of its post COD operations works out to Rs. 81.503 million and insurance component of its tariff accordingly works out to Rs. 0.5677 per kWh. The Authority has decided to allow the same to FFC. The Authority has also decided that in future, insurance will be adjusted annually, on the basis of actual expenditure, not exceeding 1% of the approved EPC cost, upon production of authentic documentary evidence by FFC.





13. Return on Equity

- 13.1 The Authority had allowed Rs. 2.6879 per kWh as return on equity (hereinafter referred to as "ROE") tariff component to FFC in the determination. The Authority had also decided that ROE shall be adjusted at COD in accordance with the GoP Policy For Development of Renewable Energy For Power Generation 2006, to ensure 17% IRR on equity.
- 13.2 FFC has requested to allow it ROE of Rs. 3.2809 per kWh and return on equity during construction (hereinafter referred to as "ROEDC") of Rs. 0.9143 per kWh at the COD stage.
- 13.3 The ROE is subject to adjustment on the basis of revised 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 97.60 the ROE component of tariff works out to Rs. 3.0859 per kWh which is hereby allowed.
- 13.4 Further, based on actual equity injections, variation in exchange rate parity between US \$/PKR, construction period allowed by the Authority and restricting the actual equity injections to equity allowed by the Authority, ROEDC in the instant case works out to be Rs. 516.171 million (US \$ 5.289 million) i.e. Rs. 0.6389 per kWh which is hereby allowed.

14. Withholding Tax

14.1 Based on the revised ROE and ROEDC, the tariff component of withholding tax has also been revised from Rs. 0.2016 per kWh in the determination to Rs. 0.2794 per kWh.

15. <u>Debt Servicing Component</u>

15.1 The Authority had assessed debt servicing component of Rs. 12.5637 per kWh in the determination. The determination provided that principal repayment and cost of debt shall be adjusted at financial close as per the actual borrowing composition. Further, the determination also stated that FFC has procured financing on the basis of KIBOR





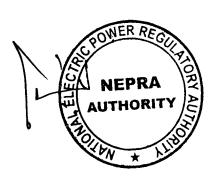
plus 295 basis points. The determination required that the benefit of 5 basis points (being lower than 300 basis points) in the debt servicing cost shall be shared in a ratio of 60:40 between the power purchaser and FFC.

- 15.2 FFC has now requested to allow it debt servicing component of Rs. 12.2461 per kWh at the COD stage.
- 15.3 The Authority has noted that 40% share of FFC 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 FFC, works out to be 0.02%. The Authority has decided to add 0.02% to debt servicing cost of FFC.
- Based on the project cost of Rs. 12,086.620 million allowed by the Authority, debt @ 80% of the project cost works out to be Rs. 9,669.296 million. Accordingly revised debt servicing component on the basis of 6 months KIBOR of 9.38 % +2.97% margin works out to Rs. 11.9119 per kWh which is hereby allowed.

16. ORDER

Pursuant to Rule 6 of the NEPRA Licensing (Generation) Rules, 2000 read with Section 31 (4) of Regulation of Generation, Transmission and Distribution of Electric Power Act 1997, FFC Energy Limited (Petitioner) is allowed to charge the following specified/approved tariff for delivery of electricity to CPPA of NTDC for procurement on behalf of Ex-WAPDA Distribution Companies:

Tariff Components	Year 1-2 RS/kWh	Year 3-5 Rs/kWh	Year 6-10 Rs/kWh	Year 11-20 Rs/kWh	Indexation
Fixed O&M					
Local	0.6244	1.3574	1.0644	1.0644	CPI - General
Foreign	0.2335	0.5077	0.3981	0.3981	PKR/US\$, US CPI
Insurance	0.5677	0.5677	0.5677	0.5677	PKR/US\$
Debt service	11.9119	11.9119	11.9119	11.9119	KIBOR





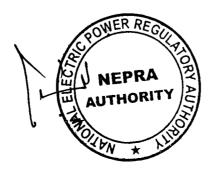
Return on equity	3.0859	3.0859	3.0859	3.0859	PKR/US\$
Return on equity during construction	0.6389	0.6389	0.6389	0.6389	PKR/US\$

- i) The reference tariff has been calculated on the basis of net annual production of 143.559 GWh at annual net plant capacity factor of 33.11%.
- ii) The above charges will be limited to the extent of net annual energy production of 143.559 GWh. Net annual production in excess of 143.559 GWh will be charged at 10% of the tariff for that particular year.
- iii) In the above tariff no adjustment for Carbon Emission Receipts (CERs) has been accounted for. However, upon actual realization of CERs, 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 Generation, 2006.
- iv) The reference PKR/Dollar rate has been assumed at 97.60.
- v) The above tariff is applicable for a period of twenty (20) years commencing from the date of the COD.
- vi) The monthly benchmark energy production table is attached herewith as Annex-I
- vii) The component wise tariff is indicated at Annex-II.
- viii) Debt Servicing Schedule is attached as Annex-III.

The following indexations shall be applicable to the reference tariff;

I. Pass-Through Items

No provision for income tax has been accounted for in the tariff. If the Petitioner is obligated to pay any tax, the exact amount paid by the Petitioner may be reimbursed





by CPPA to the Petitioner on production of original receipts. This payment may be considered as pass-through payment (as Rs./kWh) spread over a 12 months period in addition to fixed charges proposed in the Reference Tariff. Furthermore, in such a scenario, the Petitioner may also submit to CPPA details of any tax shield savings and CPPA will deduct the amount of these savings from its payment to the Petitioner on account of taxation.

Withholding tax on dividend is also a pass through item just like other taxes as indicated in the government guidelines for determination of tariff for new IPPs. Withholding tax shall be paid @ 7.5% of the reference equity. CPPA (NTDC) 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 according to the following formula:

Withholding Tax

 $[\{17\% * (E_{(Ref)} - E_{(Red)})\} \times 7.5\%]$

Payable

Where:

E(Ref)

The reference amount of equity for the relevant

year.

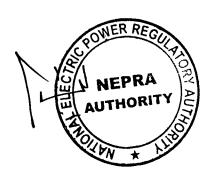
 $E_{\text{(Red)}}$

= Equity Redeemed, if any

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 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 Inflation (CPI) and O&M foreign will be adjusted on account of variation in Rupee/Dollar exchange rate and US CPI. Quarterly Adjustment for local inflation, foreign inflation and exchange rate variation will be made on 1st July, 1st October, 1st January & 1st April respectively on the basis of latest available information with respect to CPI - General (notified by the Pakistan Bureau of Statistics), 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:

 $F O\&M_{(LREV)} = FO\&M_{(LREF)} * CPI - G_{(REV)}/172.82$

 $F O&M_{(FREY)} = FO&M_{(FREF)} * US CPI_{(REV)}/229.601*ER_{(REV)}/97.60$

Where:

FO&M(LREV) = The revised applicable Fixed O&M local component of the Fixed Charges indexed with CPI - General

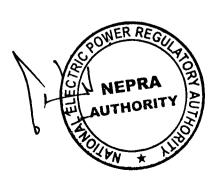
FO&M(FREV) = The revised applicable Fixed O&M foreign component of the Fixed Charges indexed with US CPI and currency fluctuation

 $FO\&M_{(FREF)}$ = The reference fixed O&M foreign component of the Fixed Charges for the relevant period.

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

CPI - G (REV) = The Revised Consumer Price Index (General)

 $CPI - G_{(REF)} = 172.82$, Reference Consumer Price Index





(General) of December 2012 as notified by the Pakistan Bureau of Statistics

US CPI(REV)

 The Revised US Consumer Price Index (All Urban Consumers) notified by US Bureau of Labor Statistics.

US CPI(REF)

= 229.601, Reference US CPI notified by the Bureau of Labor Statistics (All Urban Consumers) for the month of December 2012.

 $ER_{(REV)}$

 The Revised TT & OD selling rate of US dollar as notified by the National Bank of Pakistan

ii) Adjustment for KIBOR variation

The interest part of fixed charge component will remain unchanged throughout the term except for the adjustment due to variations in interest rate as a result of 6-monthly variation in KIBOR while spread on KIBOR remaining the same according to the following formula:

ΔΙ

= $P_{(REV)} * (KIBOR_{(REV)} - 9.38\%) / 2$

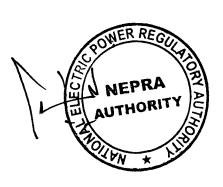
Where:

ΔΙ

The variation in interest charges applicable corresponding to variation in 6-month KIBOR. Δ I can be positive or negative depending upon whether KIBOR(Rev) > or < 9.38%. The interest payment obligation will be enhanced or reduced to the extent of Δ I for each sixmonthly adjustment on the basis of applicable six-monthly KIBOR.

P(REV)

= Is the outstanding principal (as indicated in the





attached debt service schedule to this order at Annex-III) on a bi-annual basis at the relevant six-monthly calculations date. Period 1 shall commence on the date on which the 1st installment is due after availing the grace period.

iii) Return on Equity and Return on Equity During Construction

The Return on Equity (ROE) and Return on Equity during Construction (ROEDC) components of tariff will be adjusted on the basis of revised TT & OD selling rate of US Dollar notified by the National Bank of Pakistan as per decision of the Economic Coordination Committee (ECC) according to the following formula;

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

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

Where:

 $ROE_{(REV)}$ = The revised ROE component of the tariff

expressed in Rs/kWh

 $ROE_{(REF)}$ = The reference ROE component of the tariff

expressed in Rs/kWh

 $ROEDC_{(REV)}$ = The revised ROEDC component of the tariff

expressed in Rs/kWh

 $ROEDC_{(REF)}$ = The reference ROEDC component of the tariff

expressed in Rs/kWh

 $ER_{(REV)}$ = The revised US\$/PKR exchange rate as notified

by the National Bank of Pakistan





ER(REF)

The reference exchange rate of PKR 97.60=1 US\$

iv) Insurance

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% of the EPC cost, on annual basis upon production of authentic documentary evidence by the petitioner.

III. Adjustment on account of inflation, US CPI, foreign exchange rate variation and KIBOR variation 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.

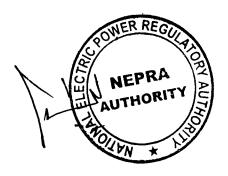
IV. Terms and Conditions of Tariff:

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.

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 for record of data.





Delivery Point:

The Petitioner shall deliver power at 132 kV at the door step of its wind farm. Upgradation of generation voltage up to 132 kV will be the responsibility of the Petitioner.

Emissions Trading/Carbon Credits:

The Petitioner would process and obtain emissions/carbon credits expeditiously and credit the proceeds to the Power Purchaser as per the policy issued by the Federal Government.

V. The order along with benchmark energy table, revised tariff table and debt servicing schedule 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

(Khawaja Muhammad Naeem)

(Knawaja Munammad Naeem) Member

(Maj (R) Haroon Rashid)

(Maj (R) Haroon Rashid) Member (Himayat Ullah Khan)

Member

(Habibullah Khilji)

Vice Chairman



Annex-I

FFC Energy Limited Benchmark Energy Table

Month	Benchmark Wind speed	Benchmark Energy Yield
	(m/s)	(GWh)
January	5.2	4.945
February	5.6	6.215
March	5.9	7.468
April	7.8	13.525
May	9.9	22.116
June	10.3	21.39
July	10.4	22.786
August	9.6	19.837
September	8	14.001
October	5.2	4.572
November	4.4	2.827
December	4.9	3.877
Total		143.559



FFC Energy Limited Revised Tariff

Year	Fixed O&M Local	Fixed O&M Foreign	Insurance	Insurance Return on Equity		Withholding Tax @7.5%	Loan Repayment	Interest Charges	Total Rs/kWh
	Rs. / kWh	Rs. / kWh	Rs. / kWh	Rs. / kWh	Rs. / kWh	Rs. / kWh	Rs. / kWh	Rs. / kWh	Rs. / kWh
1	0.6244	0.2335	0.5677	3.0859	0.6389	0.2794	3.7046	8.2073	17.3417
2	0.6244	0.2335	0.5677	3.0859	0.6389	0.2794	4.1762	7.7356	17.3417
3	1.3574	0.5077	0.5677	3.0859	0.6389	0.2794	4.7079	7.2040	18.3488
4	1.3574	0.5077	0.5677	3.0859	0.6389	0.2794	5.3073	6.6046	18.3488
5	1.3574	0.5077	0.5677	3.0859	0.6389	0.2794	5.9830	5.9289	18.3488
6	1.0644	0.3981	0.5677	3.0859	0.6389	0.2794	6.7447	5.1672	17.9462
7	1.0644	0.3981	0.5677	3.0859	0.6389	0.2794	7.6034	4.3085	17.9462
8	1.0644	0.3981	0.5677	3.0859	0.6389	0.2794	8.5714	3.3405	17.9462
9	1.0644	0.3981	0.5677	3.0859	0.6389	0.2794	9.6627	2.2492	17.9462
10	1.0644	0.3981	0.5677	3.0859	0.6389	0.2794	10.8929	1.0190	17.9462
11	1.0644	0.3981	0.5677	3.0859	0.6389	0.2794	-	-	6.0344
12	1.0644	0.3981	0.5677	3.0859	0.6389	0.2794	-	-	6.0344
13	1.0644	0.3981	0.5677	3.0859	0.6389	0.2794	-	-	6.0344
14	1.0644	0.3981	0.5677	3.0859	0.6389	0.2794	-	-	6.0344
15	1.0644	0.3981	0.5677	3.0859	0.6389	0.2794	-	-	6.0344
16	1.0644	0.3981	0.5677	3.0859	0.6389	0.2794	-	-	6.0344
17	1.0644	0.3981	0.5677	3.0859	0.6389	0.2794	-	-	6.0344
18	1.0644	0.3981	0.5677	3.0859	0.6389	0.2794	-	-	6.0344
19	1.0644	0.3981	0.5677	3.0859	0.6389	0.2794	-	-	6.0344
20	1.0644	0.3981	0.5677	3.0859	0.6389	0.2794			6.0344
Levelized Tariff	1.0454	0.3910	0.5677	3.0859	0.6389	0.2794	4.4284	4.1689	14.6056

Revised References

 Local CPI (General)
 172.820

 US Labor CPI
 229.601

 Exchange rate'
 97.60

 KIBOR
 9.38%

 Tariff in US Cents /kWh @ Rs. 97.6/US\$
 14.9647
 (FOR REFERENCE PURPOSE ONLY)



FFC Energy Limited Debt Servicing Schedule

9.38% 2.97% **12.35%**

KIBOR Spread Effective interest rate

			Local Debt	Annual				
Period	Principal	Repayment	Mark-Up	Balance	Debt	Principal	Annual	Annual Deb
					Service	Repayment	Interest	Servicing
	Million Rs.	Million Rs	Million Rs	Million Rs	Million Rs	Rs./kWh	Rs./kWh	Rs./kWh
	9,669.2960	257.9499	597.0790	9,411.3460	855.0290			
	9,411.3460	273.8784	581.1506	9,137.4677	855.0290			
1	9,669.2960	531.8283	1,178.2296	9,137.4677	1,710.0579	3.7046	8.2073	11.911
	9,137.4677	290.7903	564.2386	8,846.6773	855.0290			
	8,846.6773	308.7466	546.2823	8,537.9307	855.0290			
2	9,137.4677	599.5370	1,110.5210	8,537.9307	1,710.0579	4.1762	7.7356	11,911
	8,537.9307	327.8117	527.2172	8,210.1190	855.0290			
	8,210.1190	348.0541	506.9748	7,862.0648	855.0290	1		
3	8,537.9307	675.8659	1,034.1921	7,862.0648	1,710.0579	4.7079	7.2040	11.911
	7,862.0648	369.5465	485.4825	7,492.5184	855.0290			.,,,,,
	7,492.5184	392.3660	462.6630	7,100.1524	855.0290			
4	7,862.0648	761.9124	948.1455	7,100.1524	1,710.0579	5.3073	6.6046	11.911
	7,100.1524	416.5946	438.4344	6,683.5578	855.0290			1
	6,683.5578	442.3193	412.7097	6,241.2386	855.0290			
5	7,100.1524	858.9138	851.1441	6,241.2386	1,710.0579	5.9830	5.9289	11.911
	6,241.2386	469.6325	385.3965	5,771.6061	855.0290			
	5,771.6061	498.6323	356.3967	5,272.9738	855.0290			
6	6,241.2386	968.2648	741.7932	5,272.9738	1,710.0579	6.7447	5.1672	11.911
	5,272.9738	529.4228	325.6061	4,743.5509	855.0290			
	4,743.5509	562.1147	292.9143	4,181.4362	855.0290			
7	5,272.9738	1,091.5375	618.5204	4,181.4362	1,710.0579	7.6034	4.3085	11.911
	4,181.4362	596.8253	258.2037	3,584.6110	855.0290			
	3,584.6110	633.6792	221.3497	2,950.9317	855.0290			1
8	4,181.4362	1,230.5045	479.5534	2,950.9317	1,710.0579	8.5714	3.3405	11,911
	2,950.9317	672.8089	182.2200	2,278.1228	855.0290			
	2,278.1228	714.3549	140.6741	1,563.7679	855.0290	1		
9	2,950.9317	1,387.1638	322.8941	1,563.7679	1,710.0579	9.6627	2.2492	11.911
	1,563.7679	758.4663	96.5627	805.3016	855.0290			1,011
	805.3016	805.3016	49.7274	(0.0000)	855.0290			1
10	1,563.7679	1,563.7679	146.2900	-	1,710.0579	10.8929	1.0190	11.911

