

This petition has been prepared in light of the PROCEDURE set forth in Part II of the Rules

1. PRELIMINARY

1.1 Petitioner's Name And Address

Win Power Private Limited ("WPPL" or "the Company") 1500-A, Saima Trade Towers, I.I Chundrigar Road, Karachi-74000, Pakistan.

Tel: +92-21-111-329-663 Fax: +92-21-227-1912

1.2 Petitioner's Representatives

- AVM (R) S J Raza, Chief Executive Officer
 Contact Number: (Mobile) +92300 827 2826)
- Mr. Bryan Fitzpatrick, Vice President, AXOR Group Inc, JV Partner Office Telephone No: +001 514 846 4000

1.3 Background

Mr Rafique Dawood, Chairman First Dawood Group (FDG), has nurtured interest in wind energy since 1994. He has been working at various forums to bring this imminent form of energy to Pakistan since then. Passing years only enhanced his interest to almost a passion. Time became ripe for his dream when the Government of Pakistan decided to encourage renewable energy sources through the newly established Alternative Energy Development Board (AEDB.)

FDG therefore formed a new company "Win Power (Pvt) Ltd., registered under the Companies Ordinance 1984 in December 2004. One of the 'Objects' for which the company is established, as given in the Memorandum of Association, is "...To carry on business of power generation by installing wind turbines, allied equipment and power houses to feed electricity into the national grid...." To that end, the company acquired a Letter of Interest from the Alternative Energy Development Board for putting up a wind farm of 50MW capacity. Further, the company also acquired land in the wind corridor identified by AEDB near Gharo, District Thatta in the province of Sindh.

Realising the urgency of situation, the Company decided to carry out the project on a turn key basis. And since no expertise or experience existed within country, WPPL looked abroad for technical support. In that pursuit, a Joint Venture partnership was formed with AXOR Inc of Montreal Canada who are the owners, operators and builders of the largest wind farm in



Canada. AXOR was immediately commissioned to carry out the Feasibility for the project, which was completed and submitted to AEDB in November 2005. The same was scrutinized and approved by AEDB. Copy of approval letter, reference No B.3/1/2006 dated 9th October 2006 is enclosed as Annexure I.

Much other ground work has since then been completed, which includes but is not limited to:

- 1. Soil survey and analysis of the allocated land
- 2. Survey of international market for availability of plant and equipment
- Negotiation and selection of the debt provider i.e. Standard Chartered Bank UK. Their letter of interest confirming willingness to support our project dated 12th March 2005 is attached as Annexure II. They have later issued us a term sheet as well.
- 4. Review of the draft PPA and negotiation with NTDC, the proposed off taker, on the basis of this draft; NTDC letter reference No COO/CPPA/CE-III/D(Tech-VII)/484-86 dated 15th September 2006, confirming their willingness for power purchase from WPPL is attached as Annexure III

1.4 Petitioner is a Licensee

WPPL has already acquired the Generation License for this wind farm, bearing S No WPGL/05/2006 issued by NEPRA on 29th December 2006. Copy of the License Certificate is placed at Annexure IV.



2 BRIEF FACTS FORMING BASIS OF PETITION

2.1 Pakistan's Power Scenario. With fast track development in almost all sectors of economy, and an even more ambitious plan for the coming years, the country is faced with acute power shortages starting with 2007 unless some remedial measures are adopted. The power demand and supply projected for the next four years is as follows:



Supply and Demand

Source PPIB Site

By the year 2010, the power shortage exceeds 5,000 MW. Hence requirement of new and additional power sources is established beyond question.

2.2 Why Wind Power? The next question is what options are available. Historically, Pakistan has had power from hydel projects and some nuclear power, to which was added thermal power from IPPs in the nineties. Ground reality is that the only major hydel project in hand is expected to be operational after 2016. Some run of the river projects are in hand. No thermal power plant has been put up in the last ten years, though some are currently under construction. No new nuclear power plant is in hand today. Briefly stated the sum total of approved projects



expected to come on line by the year 2010 is 1,769 MW; a figure roughly 30% of the shortfall by that year. Furthermore, thermal power uses imported fossil fuels and hence burdens the country's import bills, as well as is not environment friendly. Every increase in the international fuel prices, automatically means a "flow through" increase in the power cost.

GOP therefore decided to encourage application of Renewable Energy especially to the power sector. The fastest growing renewable energy today around the world is wind energy, because it's clean, it's green, and it is comparatively less expensive. Its biggest advantages in Pakistan would of course be freedom from dependence on imported oil, relief to the national exchequer on import bills, shortest commissioning time and last but not the least, that, it is *green* power.

In light of the above, the real question to be addressed is not "why wind Power?" but "why Wind Power was not adopted ten years ago?"!!

2.3 Project Status. WPPL is amongst the first ten investors to get an LOI from the AEDB. From that point on, there has been no looking back and WPPL has vigorously pursued its objective. Today, we can claim that subject to turbine delivery, we are in a position to have commercial operation within 15 months of signing the Power Purchase Agreement/Implementation Agreement.

Briefly stated the project is based on BOO basis and planned for an operational life of twenty years, extendable to twenty five years. Equipment selected for this project is the Nordex N 90 machine rated at 2.30 MW. Twenty two of these would be required to meet the capacity target of 50.6 MWs. Land allocated by AEDB is in the Gharo Creek area, geographically lying east of Port Qasim, facing the virgin winds of the Arabian Sea. A total of 1720 acres contiguous land mass is earmarked for the wind farm.

Financial structuring has been done at a debt/equity ratio of 80/20 to minimize the financial costs. Standard Chartered Bank UK is arranging the debt while the equity is contributed equally by both the JV partners.

With the Joint Venture partnership in place, feasibility completed, land acquired, debt arranged, equity in place, technical expertise on side and a willing power purchaser available, Win Power sees no delay in project completion once the formalities are completed namely tariff approval and signatures on the PPA/IA.

2.4 Selected Wind Turbines and Estimated Output. Selection criteria of the wind turbines included latest technology, high efficiency and reliability, low maintenance cost, conforming to latest IEC standards and also with suitable delivery dates. After a consummate search and due diligence, our JV partner recommended the following turbines for the wind farm:

Manufacturer	Nordex Energy GmbH
Wind Turbine Model	N 90, 2,300KW
Hub height	80 m
Number of Turbines	22
Total Installed Capacity	50.6 MW



To estimate output, wind data provided by AEDB from the Gharo Mast was used. The data has minute wise wind velocities for each twenty four hour period. Micrositing of turbines was done in the available land area so as to minimize the wake affect. The annual production figures are as follows:

Gross Capacity Factor	33.33%
Annual output	16.86 MW
Wake losses 2.5%	0.422 MW
Electrical losses 2.0%	0.337 MW
Net Output Delivered	16.11 MW
Net Capacity Factor	31.83%
Hours per year	8,760
Annual Energy Generation	141,089 MWh

2.5 Project Cost and Annual O & M cost. As is well known, wind energy is capital intensive but has the advantage of no fuel cost pass throughs. So has it turned out in our case; Equipment cost alone makes up for almost 68% of the total cost. Construction cost is also high due to location of the wind farm on the sea shore and lack of access roads. It accounts for another about 15% of the project cost. The figures in Million US Dollars are:

Total project Cost	111.11 M \$ 88.89 M \$
Equity 20%	00.00 M ¢
	ΖΖ.ΖΖ ΙΝΙ Φ
O & M cost:	
Fixed O & M	1.11 M \$
Insurance (pass through)	0.79 M \$
Variable O & M	0.60 M \$
Total O & M per year	2.50 M \$

2.6 Indexation. While wind energy has the advantage of not having fuel as a pass through item in its cost breakdown, there are certain minor costs that are market driven and hence cannot be fixed. We are therefore asking for indexation and/or pass through to the off taker for following heads:

Cost of Debt Variation during construction Return on Equity Dollar Rupee Parity Dollar Euro Parity Income Tax Withholding Tax O & M LIBOR Variation Local Inflation and US CPI Insurance Premium These are presented in full details in Chapter 4.



2.7 Carbon Credits. Carbon Credits to be earned and disbursed as per Guidelines for Determination of Wind Power Tariff Year 2006" and the GOP Policy on the subject as issued by the Ministry of Environment. It may however be added that section 3.2 of the draft PPA prepared by AEDB proposes Purchaser to work on grant of carbon credits and the credits to be shared between the Seller and the Purchaser. We accept this, subject to final negotiations with NTDC to fix the sharing ratio at 50:50. However we are of the opinion that we will be a better position to manage realization of Carbon Credits and so would prefer that 100% be allocated to the Company.





3 TARIFF STRUCTURE

3.1 Introduction

The tariff has been structured to cater for the project costs covering:

- pre operating costs
- development costs
- EPC costs
- Financing costs
- Debt service costs
- O & M costs, Foreign and Local
- Admin and Management costs
- ROE
- Insurance
- Other Soft Costs, and
- Contingencies

It may be emphasized that this working of tariff will hold good for sixty days from the date of submission. Beyond that date, a 2% increase per month must be added till financial close. This is to cater for local and foreign inflation as well as euro/dollar and rupee/dollar parity etc.

The present working is based on Rs 60.00 = US\$ 1.00 and US\$ 1.3441 = Euro 1.00

The proposed tariff consists of appropriate escalable components and the actual cost structures of the Project. The escalable portion takes care of the local and foreign inflation, and rupee/dollar and dollar/euro parity. Broadly the tariff may be divided into:

- Non-escalable Energy Component
 - Debt service
- Escalable Energy Component
 - ► Local O&M costs
 - ➢ Foreign O&M costs
 - Return on equity

3.2 Non-Escalable Energy Component

3.2.1 Debt Servicing

The only non escalable energy component is the debt service cost. It covers repayment of the principal amount and payment of interest charges. The debt is planned to be financed in foreign currency (USD), with a tenor of 10 year plus 12 months grace period which is based on estimated time required for the project to achieve Commercial Operation. Hence, the debt service cost is in the first ten years of the Project's operation. For the remaining ten years the debt service cost component would be zero.



As presented in the Tariff Table in Chapter 5, the debt service component will be fully indexed to the foreign exchange rate (PKR/USD), due to the foreign financing of the Project. The interest charge portion will be indexed against variations in the LIBOR.

Additionally, a one- time adjustment in the EPC price will also be required at the time of the financial closing of the Project, which will result in an update to the debt service cost and return on equity components as of the closing date. Such concessions are already provided by NEPRA in Upfront Tariff of other power projects

Details of debt financing are discussed in section 4.4.2

3.3 Escalable Energy Component

The non-debt, escalable component covers the following items:

- Local O&M Costs
- Foreign O&M Costs; and
- Return on Equity

3.3.1 Local O&M Costs

This represents the fixed costs of all the staff for O&M including the employees' pay and allowances, administrative costs including rent, utilities and local taxes. It also includes costs such as NEPRA annual fees and bank's commissions, audit fees, legal and consultancy fees, environmental monitoring and reporting fees etc. this component is therefore subject to local CPI indexation/adjustment.

3.3.2 Foreign O&M Costs

Preventive and scheduled maintenance of all plant/equipment is required as per manufacturer's recommendations. This is to ensure that the Plant remains available for reliable dispatch and for completing its contracted life. This component also includes the cost of spare parts and time change items as well as Management Fee of the O&M Operator. This component would therefore be subject both to Eurozone CPI as well as Euro/PKR adjustment/indexation.

Insurance Cost is also included in foreign O&M cost. It consists of all risk insurance/re-insurance for the Project, as well as business-interruption insurance, which is the lender's stipulated requirement.

As per practice in Pakistan, such large projects are reinsured with foreign specialist companies. The local industry normally retains only about 5% of the risk while 95% is reinsured abroad. Lender also requires coverage of machinery breakdown, natural calamities (like earthquake), sabotage and business interruption. Since the plant/equipment cost is the major cost of the project and also totally in foreign currency, it is imperative that all aspects of the risk are covered adequately and no compromise is made in this respect. This cost would also therefore be subject both to Eurozone CPI inflation as well as to EUR/PKR adjustment/indexation.



3.3.3 Return On Equity:

The Return on Equity (ROE) component includes return on invested equity giving an IRR of 15% net of withholding tax on the basis of maximum dividends payouts possible to the shareholders during each particular year and for the whole of the 20 year period.

The final portion of equity investment in (i) local currency (PKR) and (ii) foreign currency (USD) will be submitted at financial close. A minimum of fifty percent equity will be in USD. It is therefore requested that the following indexations be allowed:

Return on Foreign EquityPKR/USD Exchange Rate and US CPIReturn on Local EquityCPI

3.4 Tariff Assumptions:

The following assumptions, which form the basis of the tariff may change between now and the financial close. The tariff will therefore have to be recalculated to account for these adjustments at financial close:

- Financing terms are as yet based on initial discussions with the financial institutions and hence are subject to final negotiations once tariff has been determined by NEPRA and the PPA/IA are signed. This will include mainly the debt-equity ratio, grace period and loan repayment term, base currency of the loan, benchmark index (LIBOR/KIBOR) and the spread margin for the financial institutions.
- 100% equity investment has been assumed in US dollars. However, final currency of the equity investment (or portions thereof) will be decided among the shareholders at the time of financial close.
- Insurance cost has been assumed at 0.5% based on the indicative rates received from foreign insurance companies. Currency for the premium payment has been assumed as Euro. Premium rate and base currency for the insurance arrangements will be finalized at the time of financial close.
- Base currency for operations and maintenance costs (excluding administrative costs and land lease rental which have been denominated in Pak Rupees) has been assumed as USD. This, however, may be finalized when contracts will be signed with the O&M operator.

Any changes in the above terms will require automatic adjustment in the tariff without referring back to NEPRA.



4. RATIONALE FOR PROPOSED TARIFFS

4.1 Introduction

The Tariff presented in Chapter 5, and for which WPPL is seeking determination, is based on the following components:

- Term of the Power Purchase Agreement (PPA);
- Capital cost for equipment and construction;
- Cost of Debt and Equity;
- 0 & M Costs;
- Variable cost (which may vary over the term of the PPA, based on inflation, foreign exchange rate and interest rate variations)

Each of these components is discussed in detail in this Chapter.

Major contributing costs to the Tariff may be summarized as shown in the table below.

ltem	Average annual cost Years 1-10 (M US \$)	Average annual cost Years 11-20 (M US \$)
Debt service cost	12.706	0
Return on equity	3.333	3.333
O & M costs	1.707	1.707
Insurance costs	0.789	0.789
Total Cost	18.535	5.829

This is based on a 20-year asset life and an annual estimated production of 141.089 Gwh

4.2 TERM OF THE PROJECT/TARIFF CONTROL PERIOD

The proposed tariff is sensitive to the term of the project i.e. length of the PPA. As in recent determinations made by NEPRA, typical power generation projects in Pakistan require long-term PPA's. This is driven both by the needs of debt providers/lenders, and in recognition of NTDC's role as the purchaser of the Project's electricity output.

The debt provider/lender's willingness to provide financing for power projects is often conditional on repayment of the loan within 10 years. As this project has a lenders commitment for 80% debt financing over a ten year loan repayment term, this implies a higher fixed charge in the first 10 years of the project, as compared to the remaining ten years (11-20) after the loan has been repaid.

NTDC may face higher tariffs in the earlier years due to debt servicing (1-10), while in the latter years (11-20), the fixed tariff will be reduced to reflect lower associated costs.

A 20-year PPA is therefore proposed for this project. The tariff during this period would specify different rates for the first 10 years and the remaining 10 years, in accordance with Rule 6 of the NEPRA Licensing (Generation) Rules, 2000.





4.3 Project Cost

4.3.1 Following table reflects a breakdown of the total project cost of US \$ 111.11 Million:

Project Costs	M US \$
EPC contract	98.45
Project Development	2.83
Project Management	1.32
Other fees	1.36
Operating capital	0.62
Financing	5.28
Contingencies	1.25
Total EPC Costs	111.11

In the above project cost, amounting to USD\$ 111.11 million we have carried cost of the 2.3 MW Nordex (N90 – 2,300 kw) wind turbines. Vendor/Equipment selection process and criteria is discussed in the next section. The main increase in cost has been attributed to increased prices of the equipment in particular the Wind Turbine Generators (WTG) due to increase in production cost and world-wide demand for WTGs, local inflation of 8% and variation in Euro/Dollar parity.

As this project is the first of its kind in Pakistan, no local wind generation cost information is available for comparison and, wind generation costs are not directly comparable with any other type of generation in use in Pakistan.

4.3.2 Equipment Selection For The Wind Farm

WPPL had given this responsibility to its JV partner who had the requisite experience. AXOR sought proposals from wind generation equipment manufacturers based on the following defined criteria:

- Equipment to be latest technology, Megawatt class and high efficiency
- Compliance of proposed wind turbine with local wind conditions in Pakistan
- Relation between final investment costs and operation cost to the estimated energy yield
- Cost of Equipment to be competitive
- Commitment to the market: Willingness to commit to the Pakistan market with regard to set-up or support in setting up a local service organization
- Energy output: Warranted power curve, performance warranty
- · Grid compatibility: WEC must comply with the latest grid condition requirements
- Track record of the manufacturer
- Suitability of O&M concept for the size and location of projects, availability of spare parts, consumables and main components



Since this project is the first of its kind in Pakistan, and equipment and expertise is not available in the local market, it would be feasible for AXOR to seek a turnkey contract. For example, the cranes required for the erection of the turbines are not available in Pakistan and will need to be brought in from overseas.

Based on these criteria, and extensive evaluation of various manufacturers, the Nordex N90 2.3 MW has been selected for this project. The decision to use the N90 for the project was influenced mainly by the following reasons:

- Nordex shows a great interest in the Pakistan market
- The N90 is a well proven technology
- Nordex has 2,814 installed Megawatts from 2,760 wind turbines, operating in 31 countries
- The Nordex N90 provided the lowest cast per kWh due to its superior production numbers at the same wind speed.

There are several WEC of the 1.8 to 2.3 MW range available from different major suppliers which allows us to change the WEC type without major impact to the existing planning. The decision to go with Nordex can, at a later stage, be altered in favor of a superior solution if one becomes available.

4.3.3 EPC Costs

The EPC cost under the Nordex proposal is USD 98.45 million and is valid till March 31, 2007. Besides the cost of wind turbines, towers, electrical equipment, spare parts and civil works which are integrated in the proposal, transportation cost specifically includes C&F to wind farm site. The major portion of the cost is attributed to plant and equipment, which constitutes approximately 70% of the current amount.

EPC Costs	M US \$
Equipment	69.80
Substation	8.85
Electrical work	2.89
Civil work	13.00
Access roads	0.94
Supervision	1.26
Engineering	0.93
Contingencies	0.78
Total EPC Costs	98.45



4.3.4 Project Development Costs

Details of the project development costs (costs other than EPC) are exhibited in the following table:

Project Development Costs	M US \$
Project Development	2.83
Project Management	1.32
Other fees	1.36
Operating capital	0.62
Financing	5.28
Contingencies	1.25
Total EPC Costs	12.66

The project development cost is based (other than consultants' fees and financial expenses) the following items:

- Project Development
 - This is cost of developing the projects since the on set of obtaining the initial LOI in November 2004.
- Project Management
 - This is cost of administering and managing the company and project contracts.
- Other Fees
- This includes the initial cost for setting up the company and its operations.
- Operating Capital:
 - While estimating this cost component, we have taken into consideration the average working capital WPPL would require for the first few months of operations.
- Financing:
- This consists of the interim financing required for the construction period of the project. In addition, the lenders structuring fees are included in the figure.

4.3.5 Euro-Dollar Conversion

The cost of the EPC contract quoted above has been converted to US\$ figures, based on an exchange rate of 1.31441 Dollar to 1.00 Euro. The actual EPC cost is subject to possible fluctuations in the exchange rate between the Euro (being the currency of EPC price) and the Dollar (being the currency for the funding of the EPC contract) at the time of the Project's financial closing.



4.4 Debt and Equity

The total project cost is approximately USD 111.11 million. Based on discussions between AXOR principal sponsors, the capital structure of the company has been envisaged at a Debt-Equity ratio of 80-20. Given this capital structure and the reference project cost detailed in the prior section, the table below details the amount of equity contributed and the debt to be raised from the capital markets.

Debt & Equity Structure		Amount (M \$)
Debt	80%	88.89
Equity	20%	22.22
Total EPC Costs		111.11

4.4.1 Equity Structure

Based on the ownership structure of the company, the principal sponsors will be committing up to 20% of the equity. The projected total equity required as per the capital structure is approximately USD 22.22 million to be shared equally between Axor and Dawood.

Rationale for Return on Equity for Wind Power Projects

Guidelines for the Determination of Tariffs for Wind Power Projects ("IPP") requires that the tariff should be determined after allowing for reasonable Internal Rate of Return ("IRR") on equity investment while taking into account the carbon credit which the IPP may get. At present, the mechanism for pricing of carbon credits is uncertain. Far the sake of clarity, we have presented the formula below for claiming IRR on equity investment, which equity investors would require. Any incremental income from carbon credits will be shared with the Purchaser separately.

Equity Investment in Foreign Currency [USD]

In line with recent determinations by NEPRA, we are proposing return on invested equity of 15.00% net of 7.5% withholding tax on dividends. This is based on the premise that the Project will be implemented on a Built Own and Operate Basis ("BOO") over a 20 year term for the Power Purchase Agreement ("PPA").

Withholding Tax on Dividends

According to the Income Tax Ordinance, 2001 income from dividends is subject to withholding tax (7.5% for power generation projects).



4.4.2 Debt Structure

The commercial loan of approximately USD 88.89 million, at the reference project cost detailed in the prior section, will be raised from the debt capital markets. The commercial loan facility will have 10-year repayment period including 1-year grace, foreign currency term facilities, and will be payable quarterly.

An annual interest rate of LIBOR plus our lender's spread of 250 to 300 basis points, which covers their risk assessment of the project, therefore equating to around 7.25% to 8.25% based on current LIBOR rate of 5.38%) has been assumed for our initial working purposes.

4.5 Operating Cost

4.5.1 Insurance

The fixed annual insurance expense during the operational phase is estimated at USD 0.789 million. We have taken approximately 0.5% of the Plant & Machinery Cost each year, which is to an extent based on indicative quotes of international insurance brokers. This expense is expected to be denominated in foreign currency since the underlying costs are also based in foreign currency. The rationale for the assumed cost is as under:

- Local insurance companies would not be in a position to adequately provide cover for this kind of
 project given the total cost (in foreign currency) and the lack of precedents for wind power projects in
 Pakistan.
- The lender/financial institutions will require insurance of the Project's assets on a replacement cost basis, which will inevitably be in foreign currency.

4.5.2 **Operation & Maintenance (O&M)**

The operation and maintenance functions for this Project will be handled by Axor through an O&M contract. Most of the personnel and other O&M costs for wind power projects are fixed component.

O & M Costs	US\$
Operations & Maintenance	887,000
Administrative & Mgt Contract	225,000
Insurance	789,000
Subtotal Fixed O & M costs	1,901,000
Variable Operating Costs	595,000
Total O & M Costs	2,496,000



It can be useful to compare the estimated 0&M costs for the Project with a benchmark. The EWEA provides a lifetime cast benchmark for O&M costs, which it estimates at Euro 0.012-0.015 (USD 0.014-0.018) per kWh over the lifetime of the turbines. This includes insurance, regular maintenance, repair, spare parts, and the turbines. Subtracting the insurance costs, results in USD 0.012-0.015 per kWh.

The total O&M costs for the Project are **USD 0.01808 per kWh**. This figure is consistent with EWEA cost range.

4.6 Indexation, Escalations And Cost Adjustment

The purpose of indexation is to remove any exposure of an investor to cost escalations, over the life of a project, over which they have no direct control. With that principle in mind, the following sections discuss the proposed indexation for various components of the tariff. Indexation formulae have been prepared taking into account the guidelines presented in the Ministry of Water and Power/Alternative Energy Development Boards, "Guidelines for Determination of Tariff for Wind Power Generation 2006."

4.6.1 Foreign Exchange

A foreign exchange indexation should be applied to those cost elements that are denominated in foreign currency (US\$ or \in). For these items, the investor will have no control over cost changes caused by exchange rate fluctuations, and these should therefore be passed through to the purchaser. The proposed tariff structure for WPPL implies that the following components should be indexed to variations in foreign exchange rate (Rs/US\$ and or Rs/ \in):

- Portions of the 0&M components that are denominated in foreign currency;
- The debt service component. The Project debt is intended to be entirely foreign funded;
- The insurance component as discussed previously will provide cover on a replacement cost basis, which will be incurred in Euros. Premiums will therefore be constructed on that basis, and insurance costs will therefore fluctuate with exchange rate movements; and
- o The portion of the ROE component that reflects the equity investments in foreign currency (US\$ or €)

Indexation for these components should be applied quarterly, on-January 1, April I, July 1 and October 1 on the basis of the TT & OD selling rate as notified by the National Bank of Pakistan (in Rs/US\$ or Rs/ \in)

4.6.2 LIBOR

The wind farm investor will have no direct control over changes in interest rates. Appropriate indexation should therefore be applied so that the interest charge portion of the debt service component of the tariff reflects changes in the London Interbank Offered Rate (LIBOR). This portion should thus be adjusted quarterly for variations in the 6-month Dollar LIBOR as published by the British Bankers Association.



4.6.3 Local Inflation

As with currency exchange rates and interest rates, a wind farm investor will not be able to influence local inflation. Appropriate indexation should therefore be applied to reflect the portion of the tariff that is subject to local inflation. For the proposed AXOR tariff structure, the following components should be indexed to the local CPI:

- Portions of the O&M component that are denominated in local currency (Rs);
- The portion of the ROE component that reflects the equity investments in local currency (Rs).

Indexation for these components should be applied quarterly, on the basis of CPI as notified by the Federal Bureau of Statistics (FBS) for the month of February, May, August and November.

4.6.4 Eurozone Harmonized Index Of Consumer Prices

The O&M and insurance costs are partially denominated in Euros. These are recurrent costs whose amount will be affected by the home country inflation. It is thus proposed that these costs should be adjusted for Eurozone inflation per Harmonized Index of Consumer Prices (HICP) as published by the European Central Bank (ECB). The index is published on monthly basis by ECB.

4.6.5 Us Inflation

The equity investment is denominated in US Dollars. As with currency exchange rates and interest rates, a wind farm investor will not be able to influence US inflation. Appropriate indexation should therefore be applied to reflect the portion of the tariff. It is thus proposed that these costs should be adjusted for US inflation per United States Consumer Prices Index (USCPI) as published monthly by the Department of Labor, United States Government.

A Summary of Indexations requested is placed at Annexure V



5. DETERMINATION SOUGHT

5.1 Introduction

Determination is sought from NEPRA in respect of the following:

- A) Grant of Tariff, as presented in para 5.2 below, to remain effective for a period of 20 years from the date of Commercial Operations; and
- B) Approval of proposed escalations in the Tariff, as setout in the subsequent para 5.3.

5.2 Reference Tariff

The proposed Reference Tariff comprising the non-escalable cost component, as described in section 3.2, and the escalable cost component, as described in section 3.3 is presented in the Table below:

	PKR	US Cents	
Average Tariff	5.1808	8.6346	
Discount Rate	1	0%	
Net Present Value	55.81	93.02	
Levelized Tariff	6.5560	10.9267	
The tariff shown above is subject to indexation as given in Annexure V			
This tariff is valid for sixty days from date of submission (15 Feb 2007)			
Beyond that date a 2% increase per month will be required to account for			
Local and foreign inflation and euro/dollar and dollar/rupee parity			

Details of the Reference Tariff are shown in Table placed at Annexure VI and Assumption for Tariff Table at Annexure VII The Project's financial projections on the basis of this tariff are shown in Annexure VIII

The specified tariff, along with the indexation, when approved, would set the maximum rate at which WPPL will sell power to the off taker.

5.3 Tariff Indexation

Indexation of cost of components of a tariff provides an investor certainty with regard to return on investment by removing exposure to such cost escalations over which investor has no control. This approach is efficient and hence minimizes total cost. Commonly, indexation protects investors against risks arising from exchange rate fluctuations, and local inflation.

Tariff indexation for the WPPL tariff has been requested in relation to known and accepted consumer price indices (CPI), LIBOR/KIBOR, on a quarterly basis and the euro/dollar and dollar/rupee parity as discussed in detail in section 4.6. These adjustments are consistent with those that have been provided in other upfront tariffs or to other IPPs by NEPRA and are also the norm around the world. Summary of proposed indexations requested is placed at Annexure V



Annexures

	AEDB Letter approving WPPL Feasibility	20
II	Standard Chartered Bank LOI	21
	NTDC Letter of Interest	22
IV	NEPRA Certificate of Gen License	23
V	Summary of Tariff Indexations Requested	24
VI	Reference Tariff Table	25
VII	Tariff Assumptions	26
VIII	Financial Projections	27
IX	Project Summary	28