

TARIFF APPLICATION

Burj Wind Energy (Private) Limited

(A project of Burj Capital)

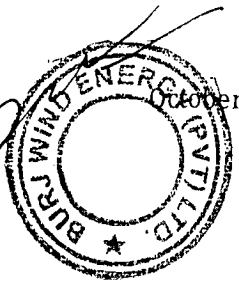
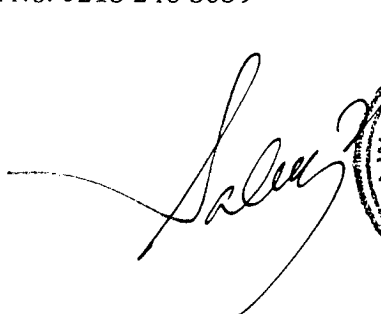
a 13.5MW Wind Power Project at Gujjo, District Thatta, Sindh Pakistan

Lead Project Developer:

Burj Power
1909 Gold Crest Executive Tower, JLT,
P O Box 309037,
Dubai, UAE
Tel: +971 4 454 2799
Fax: +971 4 454 2797

Lead Arranger:

Burj Capital Pakistan
Ground Floor, OICCI Building,
Talpur Road, I. I. Chundrigar Road,
Karachi, Pakistan.
Ph. No. 0213 246 8041
Fax. No. 0213 246 8039

 October 2014

Ref: BWE/15/14
October 24, 2014

Mr. Safeer Hussain Shah

Registrar
National Electric Power Regulatory Authority (NEPRA)
2nd Floor, OPF Building,
Shahrah-e-Jamhooriyat, G-5/2
Islamabad, Pakistan

Subject: Submission of Tariff Petition of Burj Wind Energy (Private) Limited (the "Company") for 14MW wind power project (the "Project") at Gujjo

Dear Sir,

The Company, Burj Wind Energy (Private) Limited ("BWE") by virtue of Board Resolution dated 17 October, 2014, is pleased to submit the subject Tariff Petition in respect of its 14 MW wind power project at Gujjo, District Thatta, Sindh, Pakistan.

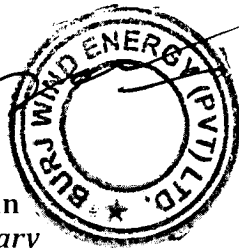
Kindly accept the Company's Tariff Petition, along with such fee as determined by the National Electric Power Regulatory Authority ("NEPRA" or the "Authority"), for kind consideration and favorable approval by the Authority in accordance with, *inter alia*, Section 31 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 read with Rule 3 of the NEPRA Tariff Standards and Procedure Rules, 1998 and other applicable provisions of NEPRA law.

A Pay Order No. CHQ\759872\1888080 dated October 20, 2014 in the sum of Rs. 413,856/- (Rupees Four Hundred Thirteen Thousand Eight Hundred and Fifty Six Only), being the non-refundable application processing fee is also attached herewith.

We are pleased to enclose herewith one (1) original along with two (2) copies of Tariff Petition. This Petition is being submitted along with a duly executed copy of an affidavit attached to the Petition.

Yours Sincerely,

Saleem Uz Zaman
Company Secretary



For information & use of

- Dir. Reg. - I / SAR - I

Copy to:

- SAT - I
- SA (Tech)
- m/R

28.x.14
cc: VC (Lic)
m (T)
m (CA)
M (M&E)

Registrar	8921
By No.	28-10-14
Dated	28-10-14

BankIslami Pakistan Limited

SHAHRAH-E-FAISAL BRANCH KARACHI

1026-SHAHRAH-E-FAISAL
Faisal Tower, M.C.H.S.
Karachi
PHONE#(021) 4555985-7

A/C PAYEE ONLY

DATE

20-10-2014

PAY ORDER NO

CHQ/759872/1888080

AMOUNT

PKR***413,856.00

PAY TO THE
ORDER OF

NATIONAL ELECTRIC POWER REGULATORY-AUTHORITY (NEPRA)-

AMOUNT

Pakistani Rupee Four Hundred Thirteen Thousand Eight Hundred Fifty-Six Only

For BankIslami Pakistan Limited

1. For content verification please call 111-ISLAMI (111-475264)
2. For Instrument Verification please visit any BankIslami Branch during Banking hours.

Payable at any BankIslami Branch

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Customer Service Execut
BankIslami Pakistan Limi
P.A. # C-324

BankIslami Pakistan Limited

CUSTOMER

P.O. NO.

DATE

BURJ WIND ENERGY PRIVATE LIMITED

759872

20-10-2014

NATIONAL ELECTRIC POWER
REGULATORY-AUTHORITY (NEPRA)-

By D/R A/C#102610453180001

P.O. AMOUNT

COUNTER VALUE

CHARGES

TOTAL

PKR**413,856.00

PKR**413,856.00

PKR**00.00

PKR**413,856.00

BURJ WIND ENERGY (PVT) LIMITED**EXTRACT FROM THE MINUTES OF THE BOARD OF DIRECTORS
MEETING OF THE COMPANY HELD ON 17 OCTOBER 2014 AT 2.00 P.M.
AT GROUND FLOOR OICCI BUILDING TALPUR ROAD, OFF I.I.
CHUNDRIGAR ROAD , KARACHI.**

The Following resolutions were passed in respect of the Company's tariff petition to NEPRA for its 14 MW wind power project in Gujjo.

RESOLVED THAT Board of Directors of Burj Wind Energy (Private) Limited, ("BWEL") have hereby approved the Company to file the tariff petition to National Electric Power Regulatory Authority ("NEPRA") in respect of its 14MW wind power generation project (the "**Project**") to be located at Gujjo, District Thatta, Province of Sindh, Pakistan and in relation thereto, enter into and execute any and all required documents, make all filings and pay all applicable fees, whatever it may be in each case, of any nature whatsoever as may be required."

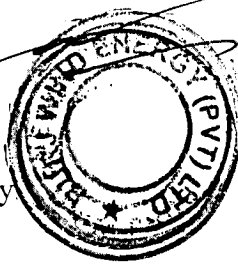
"FURTHER RESOLVED THAT in respect of tariff application to be submitted to NEPRA, Mr. Saleem Uz Zaman, Company Secretary be and is hereby empowered and authorized for and on behalf of the Company to:

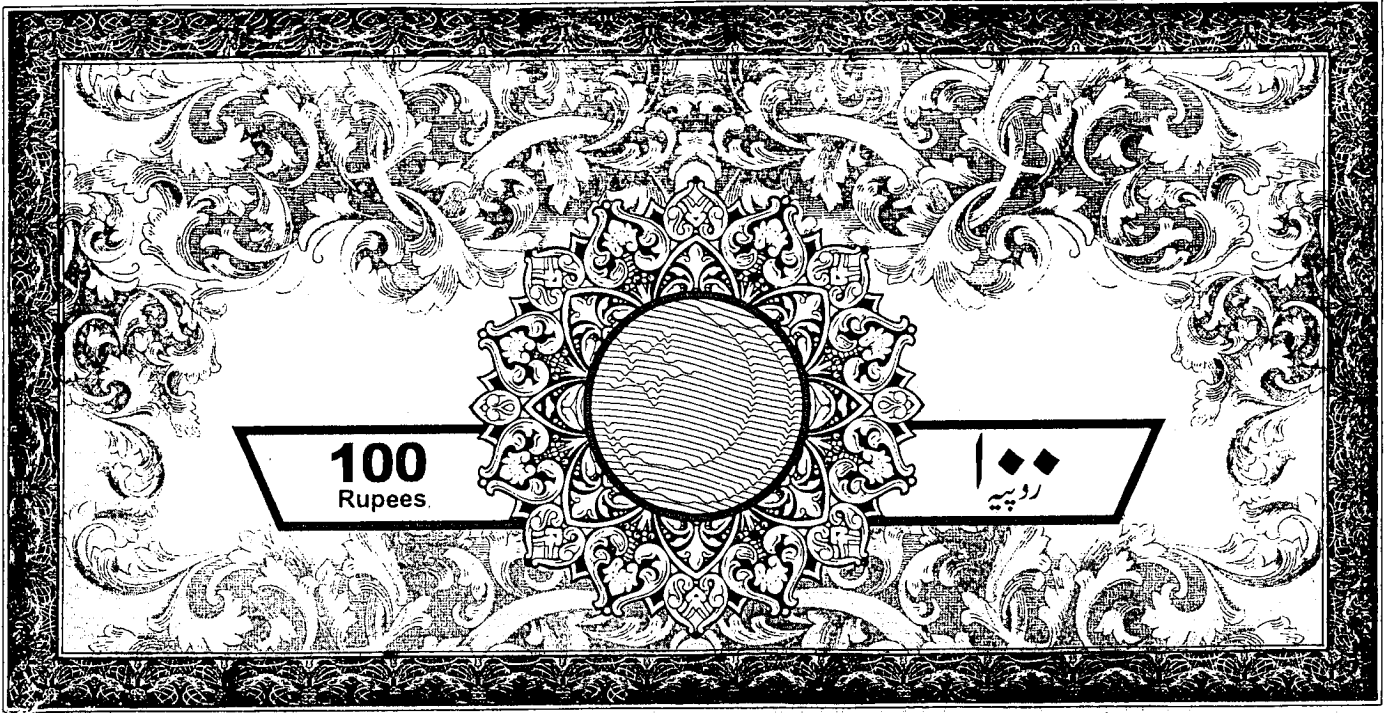
- I. Review, execute, submit and deliver the Application (including any modification to the application) and related documentation required by NEPRA, including any consents, contacts, documents, power of attorney, affidavits, statements, letters, forms, applications, deeds, guarantees, undertakings, approvals, memoranda, amendments, letters, communications, notices, certificates, request, statements and any other instruments of any nature whatsoever;
- II. Sign and execute necessary documentation, pay the necessary fees, appear before NEPRA as needed, and do all acts necessary for the issuance of tariff for the Project by NEPRA;
- III. Represent, appear and respond on behalf of the Company in the public hearings, queries of NEPRA's Authority, NEPRA's case officer, NEPRA's registrar office, stakeholders and or interveners, attend pre and post hearing meetings etc;
- IV. Appoint and engage legal, technical and financial advisors, consultants and agents to represent, appear and respond on behalf of the Company in the public hearings, queries of NEPRA's Authority, NEPRA's case officer, NEPRA's registrar office, stakeholders and or interveners, attend pre and post hearing meetings etc; and
- V. Do all such acts, matters, and things as may be necessary for carrying out the purposes aforesaid and giving full effect to the above resolution(s)."

AND FURTHER RESOLVED THAT Mr. Saleem uz Zaman, Company Secretary be and is hereby authorized to delegate all or any of the above powers in respect of the foregoing to any other official of the company as deemed appropriate.

I certify that the meeting was duly convened and held as per the Company's Memorandum & Articles of Association on 17 October 2014 at 2 pm in Karachi at Ground Floor OICCI Building, Off I.I. Chundrigar Road, Karachi and minutes of the meeting have been duly recorded in the minute book of the Company.


Saleem uz Zaman
Company Secretary





SHAKEEL IQBAL STAMP VENDOR
 Lie No 89 Shop No 113 New Ruby Centre
 Talpur Road, Canton Market, Karachi

S No ... Date **24 SEP 2014**

Issued to with Address

Through with Address

Purpose

Value Rs. Attached

Stamp Vendor's Signature *Shakeel*

(NOT USE FOR FREE WILL & DIVORCE PURPOSE)

BEFORE THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

AFFIDAVIT

I, Saleem Uz Zaman, Company Secretary, Burj Wind Energy (Private) Limited, being the duly authorized representative of Burj Wind Energy Private Limited, hereby solemnly affirm and declare that the contents of the accompanying petition/application dated October 24, 2014 including all supporting documents are true and correct to the best of my knowledge and belief and that nothing has been concealed.

I also affirm that all further documentation and information to be provided by me in connection with the accompanying petition shall be true to the best of my knowledge and belief.

Karachi dated 24 October 2014

[Signature]
 DEPONENT

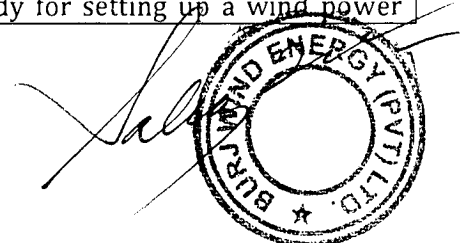


SECTION-1

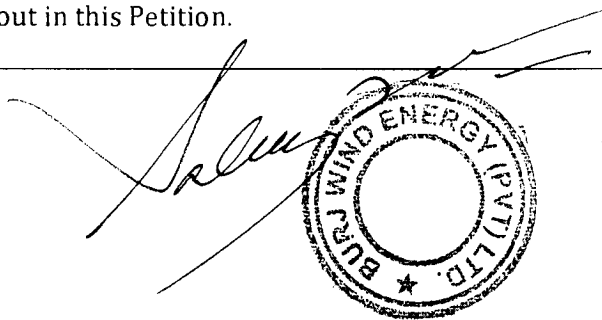
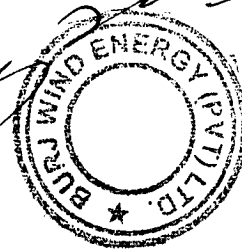
EXECUTIVE SUMMARY

**BURJ WIND ENERGY PRIVATE LIMITED
13.5MW WIND POWER PROJECT
JHAMPIR, THATTA. SINDH**

Legal Basis	This tariff petition (the " Petition ") is being filed by Burj Wind Energy Private Limited under, inter alia, the National Electric Power Regulatory Authority (" NEPRA ") Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of) 1997 (the " NEPRA Act "), NEPRA (Tariff Standards and Procedure) Rules, 1998 (the " NEPRA Tariff Rules "), read with other applicable provisions of NEPRA laws, the Government of Pakistan's Policy for Development of Renewable Energy for Power Generation, 2006 (the " Policy ") and the Government of Pakistan's Guideline for Determination of Tariff for Wind Power Generation (the " Guidelines ").
Policy Incentives	<p>This Project is being developed under the Policy. The Policy is designed to encourage investment and development of renewable projects via attractive tariffs. The Policy, inter alia, offers the following incentives to the Project and its sponsors:</p> <ul style="list-style-type: none"><input type="checkbox"/> Tariff is calculated on a project-specific basis, designed to cover costs and provide a reasonable return on equity.<input type="checkbox"/> Guaranteed access to market.<input type="checkbox"/> Guaranteed evacuation of power.<input type="checkbox"/> Transfer of wind risk to the power purchaser.<input type="checkbox"/> Incentives for power produced above benchmark levels,<input type="checkbox"/> Sharing of carbon credit revenues<input type="checkbox"/> Comprehensive security package. <p>There are further incentives for lenders to ensure that lenders' capital is exposed to minimal risk. The commitment of the Government of Pakistan to supporting private sector development of renewable energy projects is clear. The package of incentives and risk cover in the short-term renewable energy policy presents an excellent opportunity for private sector developers, as certain incentives have been retracted in the draft of the medium term policy, as disclosed by AEDB.</p>
Petitioner	<p>As required under the Section-24 of Act, Burj Wind Energy (Private) Limited ("Petitioner" or "BWE" or the "Project Company") is an entity incorporated under the Companies Ordinance, 1984, to act as a special purpose vehicle (the "SPV") and develop a 13.5MW wind power project (the "Project") at Gujjo, District Thatta Sindh Province, Pakistan.</p> <p>The certificate of incorporation, it memorandum and articles of associations are appended herewith as Annex - B & C.</p>
Letter of Intent (LOI)	Alternative Energy Development Board (" AEDB ") vide its letter # B/3/16/2007-134 dated October 31, 2012, issued an Letter of Intent (the " LOI ") to Burj Wind Energy Private Limited and requested the Project to proceed with carrying out the feasibility study for setting up a wind power



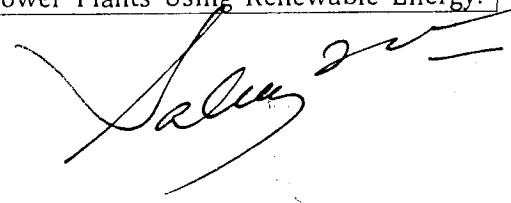
	generation project. A copy of the LOI is attached hereto at Annexure A
Rule 3(2)(a)	Petitioner's Address & Registered Office Burj Wind Energy Private Limited Ground Floor, OICCI Building, I.I.Chundrigarh Road, Karachi Petitioner Representatives; Mr. Saleem Uz Zaman, Company Secretary
Rule 3(2)(a)	Generation License The Petitioner is applying for the generation license together with this Petition.
Rule 3(s)(b)	Grounds The Petition encapsulates the grounds.
Rule 3(2)(c)	Relief Sought The Petition encapsulates the relief sought from the esteemed Authority.
Rule 3(2)(f)	Summary of Evidence (<i>Brief Particulars of Data, Facts & Evidence in Support of the Petition</i>) The Petition is supported with the pertinent documents. Further additional documents/evidence, if required by the Authority will be submitted upon request.
Submission of the Feasibility Study and approval of the same	In compliance with the requirements laid out in the Policy and the LOI, Burj Wind Energy Private Limited completed the detailed feasibility study for the project and submitted the same to AEDB for their review (the " Project Feasibility Study "). AEDB is in the process of reviewing the Project Feasibility Study. Grid Interconnection Study: In compliance with NTDC, BWE engaged Power Planners International (" PPI ") for conducting the grid interconnection study. BWE submitted the detailed grid interconnection study for its wind power project to HESCO and NTDC for their approval. Since submission of the Grid Interconnection Studies, constant follow-up has been maintained with HESCO/ NTDC at various levels.
Submission	As per terms of the NEPRA Rules, NEPRA Act, the Policy and the Guidelines , and on basis of compliance with the various conditions, BWE submits herewith a Petition for the kind consideration of NEPRA, and for approval of the following: <ul style="list-style-type: none"> (i) The Reference Generation Tariff; (ii) The energy production estimates, the Benchmark Energy Table and Monthly Complex Power Curves; (iii) The Indexations and Adjustments; (iv) Adjustments at commercial operations date; and (v) Other matters set out in this Petition.

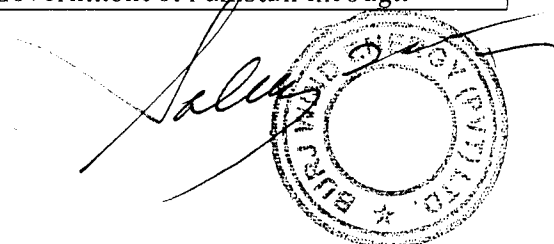
SECTION-2

PROJECT SUMMARY

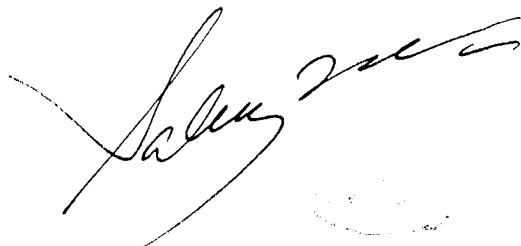
Project Company	Burj Wind Energy Private Limited		
Main Sponsors	Burj Capital		
Project Capacity	13.5MW		
Project Location	Gujjo, District Thatta, Sindh, Pakistan		
Land Area	250 Acres		
Concession Period	20 years from Commercial Operations Date		
Power Purchaser	National Transmission and Despatch Company Limited ("NTDC") through Central Power Purchasing Agency		
Wind Turbine Supplier	Dongfang Electric International Corporation		
Wind Turbine Model	FD89-1500 Kw		
EPC and O&M Contractor	Dongfang Electric International Corporation		
Benchmark Energy Generation Estimates	42.65GWh at P50		
Currency Conversion	1USD = Pak Rupees 97.6		
Estimated Project Cost	Description	USD	Pak Rupee
	EPC Cost	31,166,667	3,041,866,699
	Land	102,800	10,033,280
	Pre-COD insurance	420,750	41,065,200
	Non-EPC cost	795,230	77,614,448
	Project development cost	3,557,701	347,231,586
	Project cost BEFORE IDC & Financing Charges	36,043,148	3,517,811,214
	Financial fees and charges	2,170,183	211,809,867
	Project Cost Excluding IDC	38,213,331	3,729,621,081
	Interest during construction (IDC)	2,316,093	226,050,644
	Project Cost Including IDC	40,529,423	3,955,671,726
Financing Ratio	Description	USD	Pak Rupee
	Loan (Rs.) (75%)	30,397,068	2,966,753,794
	Equity (Rs.) (25%)	10,132,356	988,917,931
		40,529,423	3,955,671,726
Financing	<u>Loan I:</u> State Bank of Pakistan ("SBP") vide its SMEFD Circular No. 19 of 2009 dated December 01, 2009 and IH&SMEFD Circular Letter No. 11 of 2012 dated July 30, 2012 issued a Scheme for Financing Power Plants Using Renewable Energy.		



	<p>With a view to meet the growing electricity demand and to promote renewable energy projects in the country; SBP decided to provide financing for establishment of new Power Projects Using Renewable Energy with a capacity of up-to 20 MW. Any renewable power project can avail financing facility through banks/DFIs for new imported and locally manufactured plant, machinery and equipment however, preference will be given to projects being established in the less developed areas of the country, (hereinafter this Scheme will be referred as “SBP Facility”.</p> <p>Project Company has decided to avail SBP Facility.</p> <p><u>Loan II:</u></p> <p>There are certain restrictions in SBP Facility and in order to address those issues, Project Company has also approached a number of Commercial Banks to provide the loan required for the completion of the Project, (hereinafter this loan arrangement will be referred as “Commercial Banks”.</p>																		
Financing facility	<p>Local long term project finance facility;</p> <table><tr><th>Description</th><th>USD</th><th>Pak Rupee</th></tr><tr><td>Loan-I, SBP Facility</td><td>23,500,000</td><td>2,293,600,000</td></tr><tr><td>Loan-II, Commercial Banks</td><td>6,897,068</td><td>673,153,794</td></tr><tr><td></td><td>30,397,068</td><td>2,966,753,794</td></tr></table>			Description	USD	Pak Rupee	Loan-I, SBP Facility	23,500,000	2,293,600,000	Loan-II, Commercial Banks	6,897,068	673,153,794		30,397,068	2,966,753,794				
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Lead Arranger	Burj Capital Pakistan Private Limited																		
Terms of Long Term project financing	<p><u>Loan-I, State Bank Facility</u></p> <table><tr><td>Currency</td><td>PAK Rupees</td></tr><tr><td>Loan Term</td><td>2+ 8 Years</td></tr><tr><td>Grace Period</td><td>24 Months</td></tr><tr><td>Interest Rate</td><td>11.40% (Fixed Interest Rate)</td></tr></table> <p><u>Loan-II, Commercial Banks</u></p> <table><tr><td>Currency</td><td>PAK Rupees</td></tr><tr><td>Loan Term</td><td>2+8 Years</td></tr><tr><td>Grace Period</td><td>24 Months</td></tr><tr><td>Interest Rate</td><td>13.21% (6 months KIBOR + 300 bps)</td></tr></table>			Currency	PAK Rupees	Loan Term	2+ 8 Years	Grace Period	24 Months	Interest Rate	11.40% (Fixed Interest Rate)	Currency	PAK Rupees	Loan Term	2+8 Years	Grace Period	24 Months	Interest Rate	13.21% (6 months KIBOR + 300 bps)
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Currency	PAK Rupees																		
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Interest Rate	13.21% (6 months KIBOR + 300 bps)																		
Project Operation cost	Rs. 1.6040 per kWh																		
Levelized Tariff	16.1589US Cents per kWh / 15.7711 Rs per kWh																		
Land	Arranged private agriculture survey land, by way of lease of 20 years for the Project extendable to further 10 years.																		
Legal Counsel	RIAA Law, Islamabad																		
Technical Advisor	Lahmeyer International GmbH																		
Lead Arranger	Burj Capital Pakistan Private Limited																		
Lead Project Developer	Burj Power, UAE																		
Concession Documents	<div><input checked="" type="checkbox"/> Energy Purchase Agreement with the Power Purchaser (i.e. NTDC)</div> <div><input checked="" type="checkbox"/> Implementation Agreement with the Government of Pakistan through</div>																		



	AEDB. <input checked="" type="checkbox"/> Sovereign Guarantee by Government of Pakistan
Applicable GOP Policy	Policy for Development of Renewable Energy for Power Generation 2006

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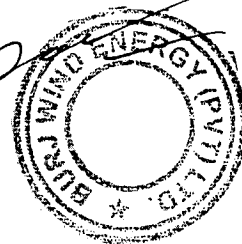
SECTION-3

MILESTONE ACHIEVED

Activity	Status
Bank guarantee by Sponsors for Letter of Interest (LOI)	Submitted
Letter of Interest	Issued
Possession of Land	Have Possession
Installation of wind mast	Installed
Collection of wind data from the project site	Ongoing
Soil survey	Completed
Geo-tech Study	Completed
Environment study	Completed
Approval from Sindh Environmental Protection Agency	NOC issued
Transportation study	Completed
Topographic survey/study	Completed
EPC Contract with Dongfang	Signed
Feasibility study submitted to AEDB	Completed
Grid interconnection study	Completed
Wind related studies - wind resource assessment	Completed

Following are the future milestones;

Activity
Issuance of Generation License
Tariff determination by NEPRA and Letter of Support from AEDB
Insurance
Execution of Energy Purchase Agreement (EPA)
Execution of Implementation Agreement (IA)
Execution of Financing Documents and meeting condition precedents
Achievement of financial close and issuance of notice to commence
Project Construction and Commercial Operations Date



SECTION-4

KEY PROJECT STRENGTHS

The key strengths of the Project are proposed below:

a) Executed EPC and O&M Contracts with a global leader in wind technology

Project Company has been able to execute its EPC Contract with Dongfang Electric International Corporation, China. Project Company is negotiating O&M Contract with Dongfang. The Project Company had undergone discussions with the leading wind turbine manufacturers of the world including Nordex, General Electric, HydroChina Huadong Engineering Corporation with GoldWind as wind turbine supplier. Based on the technical evaluation of the proposals, Project Company selected Dongfang Electric International Corporation as the EPC Contractor and O&M Operator.

b) Definitive contracts

- i. Lump sum, fixed price and date certain.
- ii. Full scope of work covering both EPC and O&M phases.
- iii. Sufficient contractor security/performance warranties to ensure completion and performance.

c) Improved Technology

- i. FD89-1500 kW being the latest technology on offer based on successful predecessor versions that have already been running around the world and featuring important improvements;
- ii. Better energy production.

d) Strong Project Management Team

The Project is being managed by a team of professionals, who derive experience of commissioning various projects worldwide.

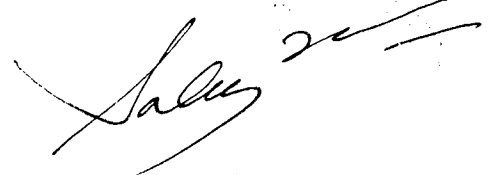
BWE has employed a team of leading and most reputable foreign and local names to act as the consultants to-the Project Company for the development of the Project. The team of consultants brings with it knowledge of the global wind energy market and practices, experience of transaction structuring, strong grasp of concessionary framework in Pakistan and transaction execution capability. Brief profiles of the same are provided below:

RIAA Law - Project's Legal Counsel

The firm, RIAA Law was established in 1989. The-firm is among the largest and most reputed law firms in Pakistan. While offering its clients the whole gamut of legal services, the firm has particular expertise in areas of project finance, mergers and acquisitions, privatizations, power projects, oil and gas projects, infrastructure projects, banking and finance, intellectual property, international trade, anti-dumping, telecommunication, construction, mining and pharmaceutical sectors. The firm is recognized as the leading Project Finance law firm of Pakistan. Its partners have been involved for more than 20 years in more than 90% of all project finance transactions undertaken in the private sector.

Lahmeyer International GmbH - Project's Technical Consultant

Lahmeyer International is the project's owner's engineer. As an independent company of consulting engineers, Lahmeyer offers a wide range of planning and consultancy services. Positioned as an international market leader in the engineering consulting business, the Lahmeyer Group employs more than 1,500 people from over 30 specialist fields worldwide. Lahmeyer has executed projects in 165 countries all around the globe. Lahmeyer has long-standing worldwide experience in the



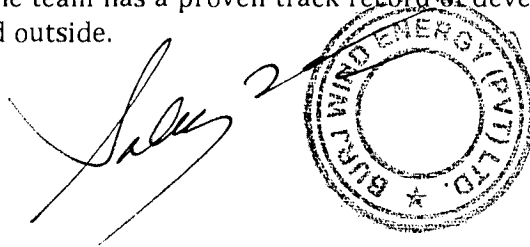
fields of power generation and energy supply and is a competent partner for the realization of wind energy plants with a decade of experience on projects all over the globe.

Burj Capital Pakistan Private Limited - Lead Arranger

Burj Capital offers its services on a regional basis by a team of investment banking professionals with an unrivaled depth of experience in conventional and Islamic banking, having led transactions for clients in the growing economies around the world, the Middle East to the Sub Continent and Asia to Africa. Its investment banking professionals have in-country, hands on investment, operating and transaction execution experience throughout Europe, Eastern Europe, Africa, the Far East Asia, and the Middle East.

Burj Power - Lead Project Developer

The Project is being developed by Burj Power. Burj Power ("BP") is a power project advisory and management company, headquartered in Dubai, UAE with an objective to develop, build, and operate power projects in the Africa and Asia region. It was organized by a strong team of industry veterans with a successful track record of developing, operating and managing large power assets globally, including Pakistan, both as a part of the global power company, The AES Corporation as well as on their own. The team has a proven track record of developing sustainable and profitable projects both in AES and outside.

A handwritten signature in black ink is written over a circular stamp. The stamp contains the text "BURJ WIND ENERGY (PVT) LTD." around the perimeter and a small star in the center.

SECTION-5

SPONSORS PROFILE

Burj Capital is an international investment firm focused on developing and managing renewable power generation and retailing. Burj Capital aims to create a lasting value for its investors and partners by identifying opportunities where it can either build or unlock value by utilizing its team of industry and business experts who have a proven track record of investing across a variety of sectors and combining them with access to capital. The firm's world class and multi-disciplined professionals have a successful track record of identifying high quality assets and advancing them from development to operations.

Burj Capital's business objective is to achieve long term capital appreciation for its shareholders by developing Greenfield initiatives or investing in companies requiring expansion or growth capital. The company's target markets are Pakistan, the Middle East and Africa. Burj Capital is also evaluating select opportunities of acquiring and developing renewable energy generation companies and projects in Europe.

Headquartered in Dubai, United Arab Emirates, Burj Capital maintains presence in Singapore Karachi and Islamabad through its own and its representatives' offices.

Business Verticals

- Renewable Power: Burj Capital is developing the following projects:
Projects under advanced stage of development:

Pakistan:

50 MW Jhimpir wind power project, in Jhimpir, Sindh

15 MW Gujjo wind power Project, Gujjo, Sindh

15 MW Gharo wind power project Gharo, Sindh

Projects pipeline:

Pakistan:

200 MW wind power project in Sindh

11 MW waste to power generation project in Karachi

UAE:

4 MW landfill waste gas to power project in Ras Al Khaimah UAE

Kenya:

2 x 40 MW wind power projects in Meru and Lambwe Valley

20 MW solar power project in Meru

West Africa:

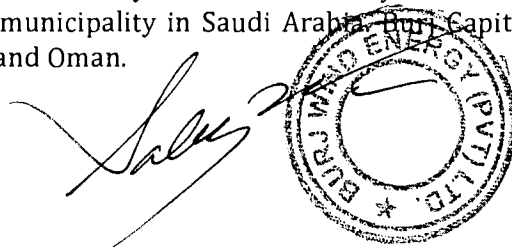
5 x 20 MW solar power projects in UEMOA countries in West Africa

Europe:

100 MW wind



- **Oil & Gas:** Burj Capital owns Gray Mackenzie Oilfield Services ("GMOS"), a UK based oil & gas services company with a 13-year track record in the Middle East. GMOS provides E&P companies end-to-end services including procurement, human resources, turnkey project development, and operations management. GMOS is currently underway expanding its operations to Pakistan.
- **Retailing:** Burj Capital holds franchise for Nine West in Pakistan. It operates three flagship stores in Karachi, Lahore and Islamabad. Nine West is a leading international brand for ladies footwear, handbags and other fashion accessories. Two additional stores are now being planned for Karachi and Lahore along with franchise opportunities under review for other main cities of Pakistan. Burj Capital is also planning diversification into fast food, men's fashion, and supermarkets.
- **Investment Banking:** Operating under the brand name "Burj Capital", it is offering its services on a regional basis by a team of investment banking professionals with an unrivalled depth of experience in conventional and Islamic banking, having led transactions for clients in Middle East, Pakistan and Africa. Its investment banking professionals have in-country, hands on global investment, operating and transaction execution experience. By combining corporate advisory with access to a diverse capital base, regional knowledge and proven execution, the investment banking vertical is strategically positioned to address the diverse needs of conventional and Islamic clients in the target region. Firm's investment banking platforms include Burj Capital Pakistan, Burj Partners, UAE and joint ventures in Zambia and Ghana. Deal execution is carried out from Karachi and Dubai.
- **Waste Management:** In 2013, Burj Capital partnered with a leading waste management company in the Middle East, Ceres Associates Gulf ("Ceres"). Ceres, with offices in the UAE, KSA and Pakistan, has been responsible for design, development, construction and operation of entire waste management systems across seven major cities in the Middle East which include cities of Medina, Jeddah, Ras Al Khaimah and Umm Al Quwain. Total value of waste management facilities delivered by Ceres is over AED 200 million and it handles more than 13,000 tons of solid municipal waste daily. Ceres is currently constructing a state-of-the-art zero waste system for Qaseem municipality in Saudi Arabia. Burj Capital is expanding Ceres' operations in the UAE, Pakistan and Oman.



The image shows a handwritten signature in black ink, which appears to be 'Salim', written over a circular stamp. The stamp contains the text 'BURJ CAPITAL ENERGY (PVT) LTD.' around the perimeter, with a small star symbol at the bottom center.

SECTION-6

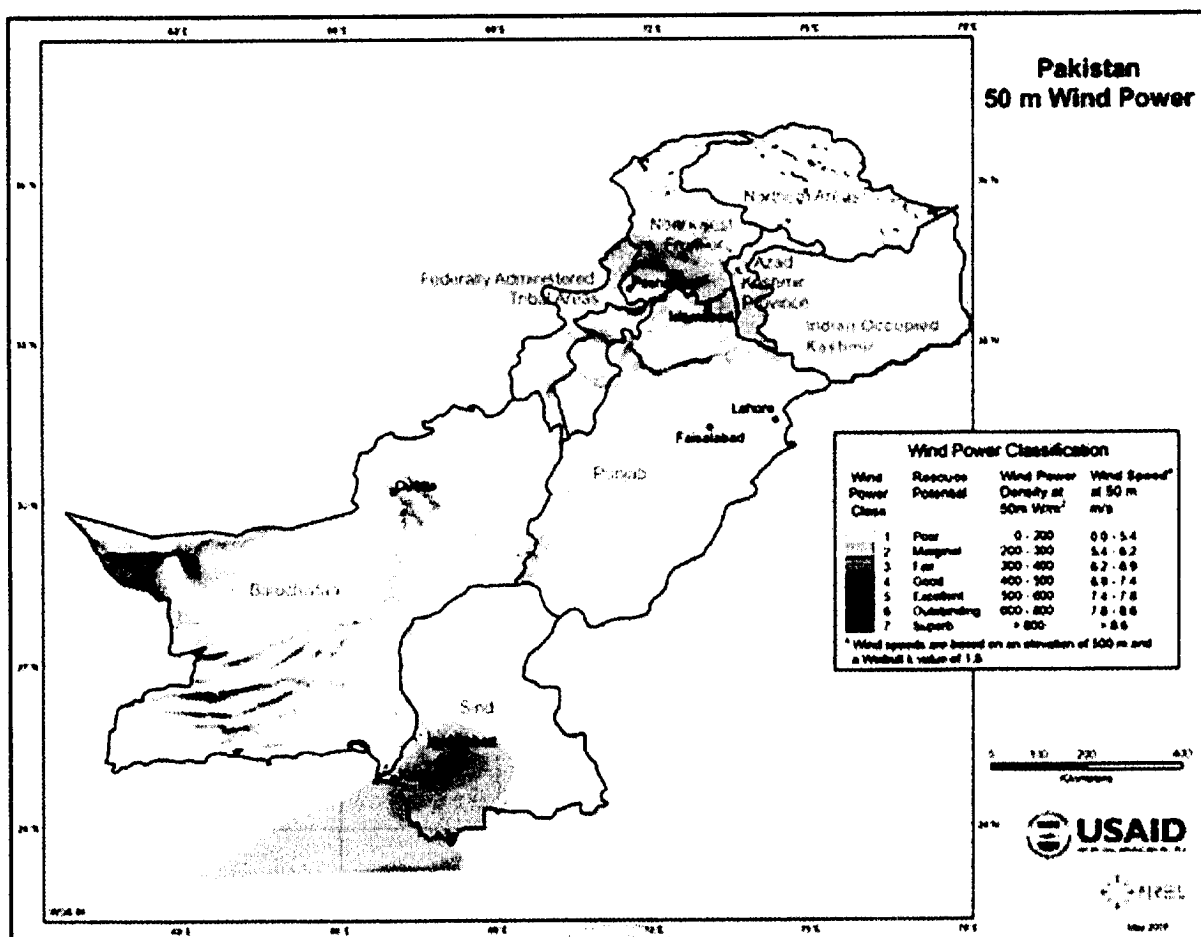
PROJECT SITE

6.1 Introduction

Project is located in Gharo-Jhampir Ketu Bander wind corridor; a wind corridor identified and approved by AEDB as one of the areas with high wind speeds. An area covering approximately 250 acres for establishing 13.5 MW wind farm in Gujjo, Thatta, Sindh, Pakistan is arranged by the Project Company on lease from the Private Owners.

Pakistan has a considerable potential of wind energy in the coastal belt of Sindh, Balochistan and in the desert areas of Punjab and Sindh. This renewable source of energy has however, not been utilized significantly in the country. Wind data of Pakistan has been collected by the Pakistan Metrological Department and has been analyzed by AEDB. Over a dozen wind masts have also been installed in various different locations by private companies pursuing wind power projects in the area. As per the collected data, the coastal belt of Pakistan has a wind corridor that is 60 km wide (Gharo ~ Kati Bandar) and 180 km long (up to Hyderabad). This corridor has the exploitable potential of 50,000 MW of electricity generation through wind energy.

The map of Pakistan shown below, developed by USAID, shows the country's wind power corridors along with their classification according to the wind speed.



USAID Wind Map

6.2 The Land

Gujjo is situated about 80 km away on National Highway from Karachi (Pakistan's biggest metropolitan city) to Hyderabad and is a small town of approximately 30,000 inhabitants in Thatta District, Sindh, Pakistan. Gujjo wind corridor falls within the Gharo-Keti Bandar wind corridor, which is amongst the best wind corridors of the country.

The Project Company has the possession of the land and installed its own wind data collection mast in October 2012.

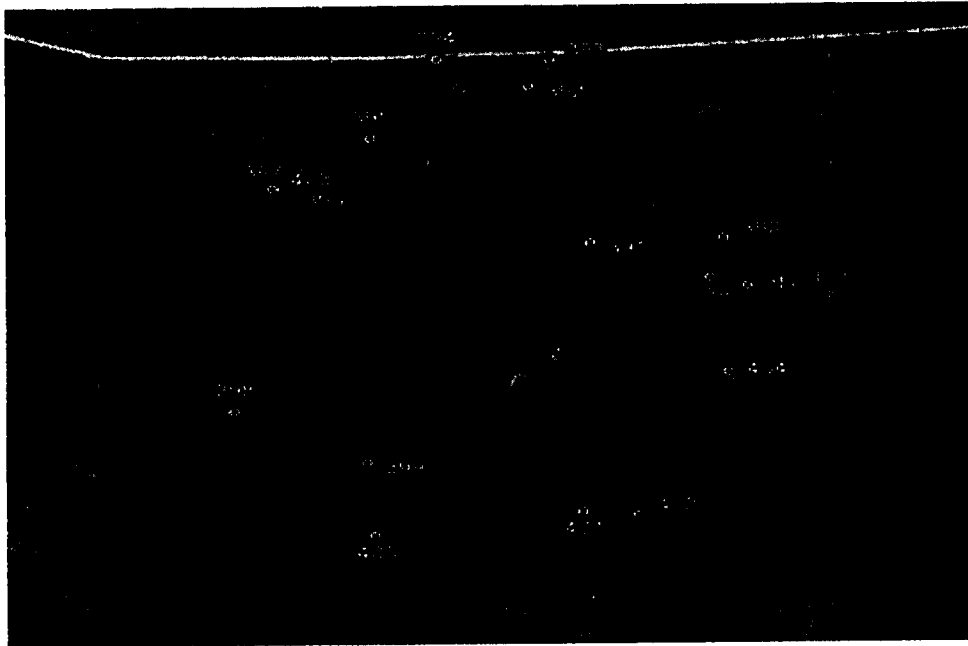
6.3 Land Coordinates

The Project Site coordinates are given below;

S. No.	Longitude	Latitude
A	67°49'03.54" East	24°44'05.43" North
B	67°48'59.84" East	24°44'06.34" North
C	67°49'01.17" East	24°44'10.74" North
D	67°48'47.83" East	24°44'10.30" North
E	67°48'41.64" East	24°44'27.83" North
F	67°48'43.76" East	24°44'30.83" North
G	67°48'32.44" East	24°44'30.91" North
H	67°48'25.81" East	24°44'22.08" North
I	67°48'21.20" East	24°44'17.21" North
J	67°48'18.64" East	24°44'17.38" North
K	67°48'12.12" East	24°43'51.48" North
L	67°48'25.45" East	24°43'45.66" North
M	67°48'26.21" East	24°43'37.40" North
N	67°48'47.06" East	24°43'40.04" North
O	67°48'52.65" East	24°43'39.64" North
P	67°48'16.08" East	24°44'16.54" North
Q	67°49'01.65" East	24°43'55.70" North

Technical layout of the Project is shown below;





Source: WindRose Consultancy

6.4 Land Surroundings

The Site is situated at a distance of 3 km from the population of local villages, decreasing any chances of potential threat to local dwellers. There are no nesting habitats for any large or significant avian populations located in the project area of influence.


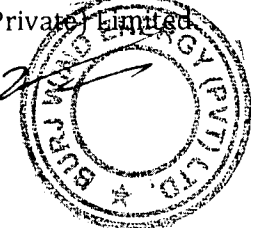
Topographically the area is flat with sporadic vegetation like wild grass etc. The land is generally flat; majority of the terrain is 55-145m above sea level. Terrain conditions can be classified as regular in general. There is a seasonal rain drain in the area, which is discharged during monsoon season. The ground and soil conditions are stable for turbine foundations and crane pads.

Due to its close location to Arabian Sea, the area is hot and humid with very low precipitation. This has made the area barren. Since basic amenities were not available in the area hence most of the local population residing in the area migrated to nearby villages which are more than 03 km from the Project Site.

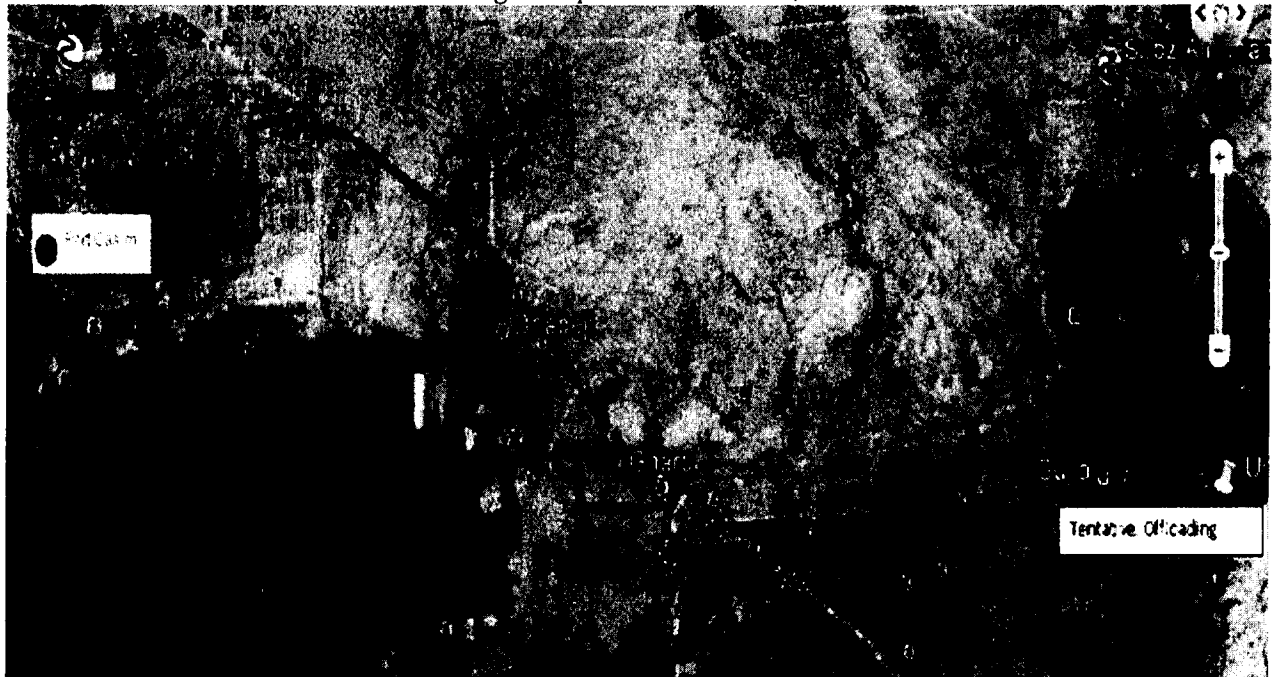
6.5 Logistic

The delivery of equipment and construction of wind project also requires that the terrain be accessible by heavy-duty vehicles (e.g., tractor trailers, cement trucks) and cranes. As there are no steep slopes or deep gullies therefore it will not be difficult to assess and mitigate unacceptable safety risks.

Components of the wind turbine will require transportation to the Site from the delivery point i.e. Port Qasim via National Highway. Project Site is approximately 73~75 km from the Port Qasim, Karachi. The Project Site is located in a small town not more than about 12km from Thatta and is connected to Karachi through N5 via Karachi-Hyderabad SuperHighway-Motorway (M-9). The access route to the Project Site has been reviewed for the delivery of blades, tower, and other components. Route access report is completed by M/s Jehangir Services (Private) Limited.

The route was surveyed from Port Qasim, Karachi to the Project Site, Gujjo, Thatta along the road to the site entrance. The route on the Google map is shown below;



Route map

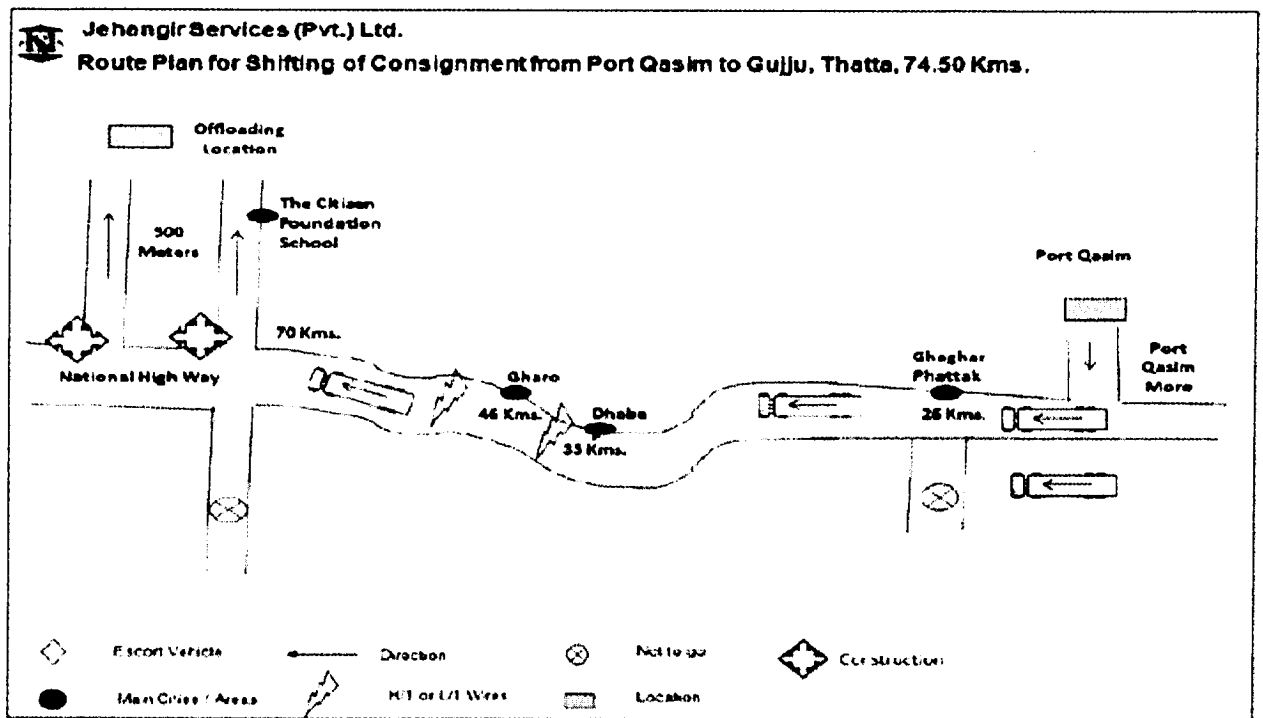
Source: Jehangir Services (Private) Limited

Based on the report, no special precautions would be required in respect of vehicle movements other than adequate traffic management and vehicle supervision by escort vehicle. On the basis of information provided by the EPC Contractor, standard allowable weights would not be exceeded, removing any issues associated with the abnormal load damage. However, existing roads may need to be widened to provide larger turning radii so that vehicles carrying oversized components (blades, tower sections) can move more easily.

Project Company will ensure that adequate warning signs be implemented to warn other road users at critical points along the route.

Route plan highlighting junctions & vehicle paths is given below;





Road Map

Source: Jehangir Services (Private) Limited

6.6 Soil Condition

Soil conditions are also favorable for road construction and for installing underground facilities such as wind turbine foundations, fiber-optic communication lines, and electrical conductors.

M/s Soil Testing Services (STS) conducted geo-technical investigation of the Project Site. Its scope of work included drilling of boreholes, carrying out field tests to obtain adequate subsurface information, collections of soil samples, laboratory testing and preparation of report including recommendations for foundation design. The boring work at the Site was accomplished by Rotary Wash Drilling Method, in which the borehole is advanced by constant rotation of the bit and it cuts the material loose. Bentonite was used as drilling fluid. The returning drilling fluid brings up the soil cuttings, which are preserved as disturbed samples for visual identification of the soil. Core samples were collected by using NX core barrel. Stratigraphy of various soil layers at the Site has also been assessed through information / data from drilling, field testing and laboratory test results. In addition to field testing, a number of laboratory tests were also conducted on selected soil samples.

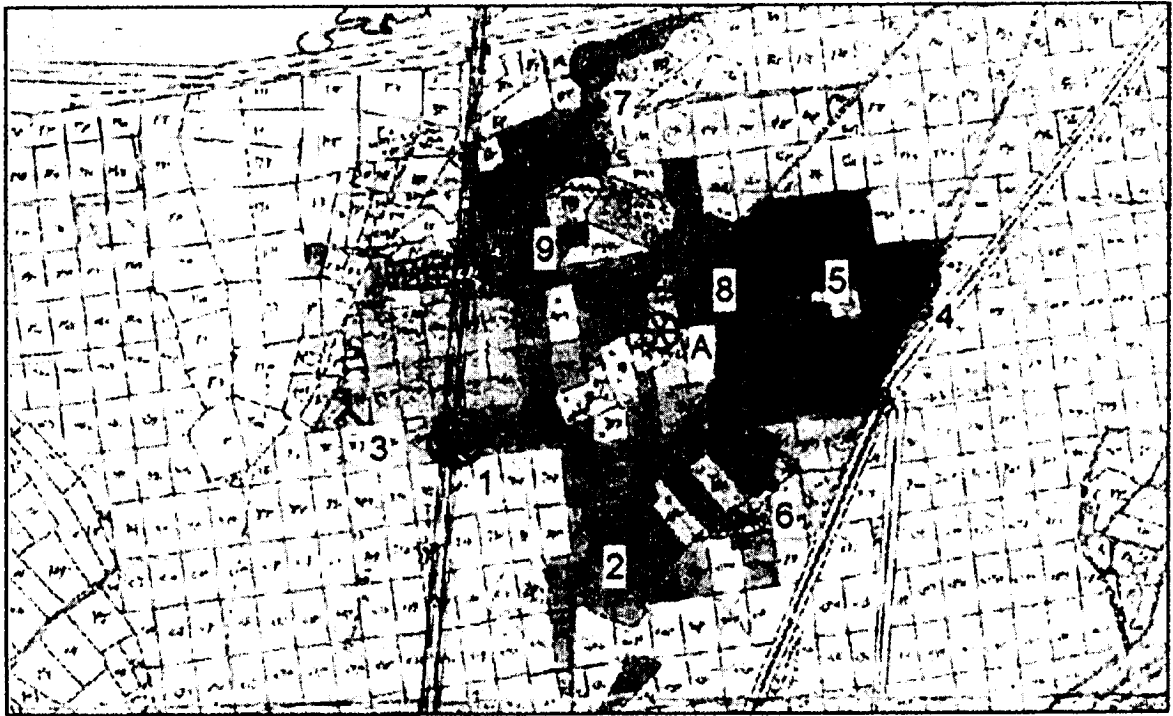
Borehole locations were planned in a manner to obtain fair amount of information about subsoil conditions up to a considerable depth. A total of three (03) boreholes were drilled at the Site. Depth of each borehole was 40.0 meters below the existing ground level.

Geotechnical investigation for wind turbine foundations at Gujjo was carried out in November, 2012. Three (03) boreholes were drilled as part of the field investigation. Soil and rock samples were also collected during the field investigation. The boreholes were drilled at locations 1, 4 and 7 in the boreholes location plan shown below.

[Signature]

[Circular Stamp: JEHANGIR SERVICES (PVT.) LTD. 1998]

Following picture shows the location of the three bore holes (Blue circles);



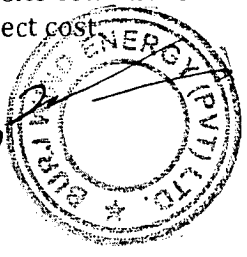
The ground conditions at Site indicated presence of silty clay/ clayey silt from the existing ground surface up to a maximum depth of 24 meters. Rock deposits including mudstone and limestone were also encountered at the site. These rock deposits were classified in very weak to weak category of BS 5930 classification of rocks.

Mudstone deposits have also been encountered in all the boreholes drilled at the Site. The values of the recovered cores vary from very poor to fair. According to the strength characteristics the rock was classified as very weak.

Limestone deposits were encountered at the Site. The values of the recovered cores vary from very poor to poor. According to the strength characteristics this rock is classified as weak.

In designing the foundations, it is primarily important that soil is capable of carrying loads of all sorts of engineering structure placed upon it without causing any hazard and trouble. Based on the findings of the study, it was decided to use sulphate resistant cement for all concrete work below the ground level. Foundation system will be designed to prevent excessive settlement or shear failure of soil due to structural loads. Therefore, turbine foundations will be placed on pile foundations after considering ground conditions and the size of structure. It was also identified that sub-soil consists of layers of limestone, sandy shale, and conglomerate. Ground water was encountered in all three boreholes up to the end of each boring.

Al-Husnain Enterprises conducted the site topographical survey of the Site. The survey was conducted in order to give the EPC contractor a better understanding about the site conditions and to avoid any unforeseen surprises that could hamper the Project or increase Project cost.



The site pictures are given below;

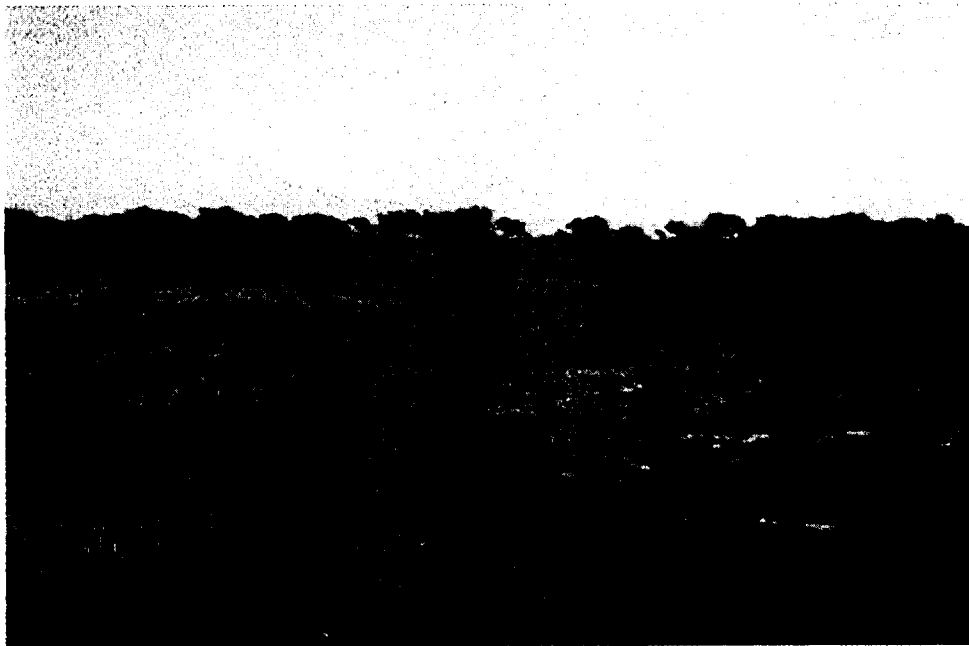


Location Picture No 1



Location Picture No 2

[Handwritten signature]



Location Picture No 3



Location Picture No 4

Salvador

SECTION-7

SELECTION OF EPC CONTRACTOR

BWE circulated a Request for Proposal ("RFP") to various equipment suppliers and EPC Contractors of wind power plant soliciting EPC proposals. In response, only following two companies showed serious interest and submitted their proposals.

1. Dongfang Electric International Corporation; and
2. HydroChina Huadong Engineering Corporation with GoldWind as wind turbine supplier.

The Project Company engaged Lahmeyer International for thorough evaluation of EPC proposals besides reviewing proposals internally.

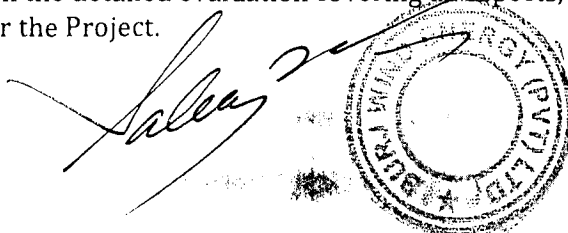
Negotiations were carried out with both the parties after proposal evaluation. Technology and other technical parameters were sorted out. Due consideration was also given to the financial strength and market acceptability of the equipment suppliers and EPC Contractors.

The following Table displays the statistics of Dongfang and GoldWind/HydroChina machines based on an independent WRA conducted by Lahmeyer International for the Project;

Wind Farm Energy	Dongfang	GoldWind/ HydroChina
Type of Turbine	FD89-1500 kW	GW77
Turbine Capacity [kW]	1,500	1,500
IEC Wind Turbine Class [-]	IEC IIIB	IEC IIA
Number of WTG [-]	9	9
Installed Park Capacity [kW]	13,500	13,500
Hub Height [m]	85	85
Rotor Diameter [m]	89	77
Gross Energy Production (free-stream) [MWh/y]	46,138	42,381
Wake Losses [%]	5.11	4.93
Wake Reduced Energy Production [MWh/y]	43,780	40,292
Park Efficiency [%]	94.9	95.1
Capacity Factor [%]	37	34
Mean WTG Result [MWh/y]	4,864.5	4,476.9
Full Load Hours [Hours/year]	3,243	2,985

Based on Lahmeyer International's WRA, Dongfang with turbine type FD89 is producing 7.9% more energy as compared with the Goldwind/HydroChina with turbine type GW77. Total production of the total wind power plant (sum of all turbines) of Dongfang is higher than GoldWind/HydroChina. Dongfang provides lowest cost per kWh due to its superior production numbers at the same wind speed.

Project Company and Burj Capital respect both the esteemed equipment suppliers/ EPC Contractors. Based on the detailed evaluation covering all aspects, it was decided to select Dongfang as EPC Contractor for the Project.



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SECTION-8

CONTRACTUAL FRAMEWORK

The contractual framework of the Project follows a structure similar to that of Independent Power Producers ("IPP"s) being setup under previous power policies in Pakistan.

The key terms of the relevant project agreements are summarized below.

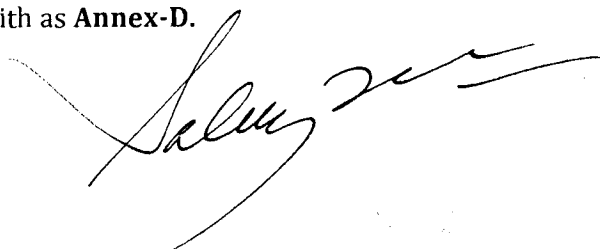
8.1 Implementation Agreement (IA) -IA grants the right to the Project Company to implement the Project, extends certain concessions and defines each party's responsibility during the construction and operational phases of the Project. AEDB will sign an IA on behalf of GoP. IA also provides general support of the government for obtaining necessary GoP authorizations/consents. The Company is permitted to import, freely and without taxes, all items necessary for the Project. Availability of foreign currency is guaranteed by GoP and the Company is also adequately protected from changes in law. This agreement also sets out the rules, terms and conditions of the GoP Guarantee, which provides a sovereign guarantee covering the payment obligations of the Off-taker under the Energy Purchase Agreement (EPA).

8.2 GoP Guarantee - GoP is providing a Sovereign Guarantee to the Project which covers the payment obligations of the Power Purchaser and Ministry of Finance under the project agreements.

8.3 Energy Purchase Agreement - The Company will enter into a long term Energy Purchase Agreement ("EPA") with National Transmission and Dispatch Company Limited ("NTDC") under which NTDC undertakes to purchase the capacity output of the Company for a continuous period of 20 years. The EPA describes the terms and conditions, instructions and procedures for the operations of the power plant. Under the agreement, the off-taker will take the wind risk, which means that the Off-taker will pay fixed monthly energy payments to the Project Company

8.4 Wind Risk - The proposed tariff is designed keeping in view the fact that the wind risk is assumed by the Power Purchaser. Monthly payments will be made by NTDC for the benchmark energy produced by the Project. Further, bonus payments are also applied on any energy produced over and above the benchmark energy. Standard EPA approved by GOP provides payment mechanism of the bonus energy. The Petitioner prays that NEPRA states explicitly in the tariff determination that bonus energy payments will be made on monthly basis.

8.5 Environment - The Petitioner carried out the initial environmental examination (IEE), which was submitted to the Environmental Protection Agency (EPA), Government of Sindh. There is no significant environmental impact that would prevent or adversely affect the construction of the Project. EPA Sindh has accorded approval to the Project. Copy of EPA, Sindh's IEE approval is appended herewith as **Annex-D**.

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SECTION-9

PROJECT CAPITAL COST

9.1 Introduction

The Project will comprise of installation of up to nine (9) wind turbine generators. Project will be constructed under the terms of a fixed-price, turnkey contract whereas construction will be completed in a continuous period of 12 months.

Total Project Cost of US\$40,529,423, expressed in United States Dollars, has been calculated after thorough analyses, evaluation and understanding of the dynamics that affects the development, construction and operations of a wind farm in Pakistan.

The estimated total Capital Cost includes the following;

- i) All turnkey engineering, procurement, and construction costs;
- ii) Construction management cost and Project development cost;
- iii) Land and site preparation costs;
- iv) Duties and taxes;
- v) Insurance costs; and
- vi) Interest cost and related financing charges during construction.

Withholding tax on dividend is 7.5% payable at the time of payment of dividend. Profit of the Project Company is exempt from corporate tax. The Project cost will be financed by a combination of Loan and equity.

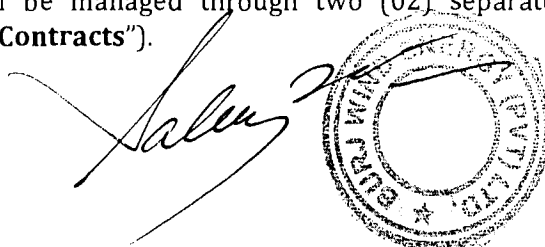
Break up of Project Cost is given below;

PROJECT COST	US\$	Rs.
EPC Cost	31,166,667	3,041,866,699
Land	102,800	10,033,280
Pre-COD insurance	420,750	41,065,200
Non-EPC cost	795,230	77,614,448
Project development cost	3,557,701	347,231,586
Project cost BEFORE IDC & Financing Charges	36,043,148	3,517,811,214
Financial fees and charges	2,170,183	211,809,867
Project Cost Excluding IDC	38,213,331	3,729,621,081
Interest during construction (IDC)	2,316,093	226,050,644
Project Cost Including IDC	40,529,423	3,955,671,726

9.2 EPC Cost

EPC Contracts are executed on a fixed price, lump sum, date certain basis. With respect to the cost overruns and additional costs incurred following Force Majeure Events, the Company's reasonable restoration costs caused by Pakistan Political Force Majeure Events or a Change in Law will be recovered through supplemental tariff under the Energy Purchase Agreement.

EPC of the Project will be managed through two (02) separate and independent contracts (collectively called "EPC Contracts").



The Project Company has signed legally binding and executable contracts with Dongfang Electric International Corporation ("**Dangfong**").

The consideration payable to Dangfong for supply of equipment is inclusive of all taxes and duties levied in China. Project Company is to provide revolving (automatic) letter of credit to EPC Contractors after advance payment.

9.3 Land

Project will be constructed on private agriculture survey lands of around 250 acres.

9.4 Duties and Taxes

Customs Duty, Special Excise Duty, Sales Tax, Income Tax, Sindh Infrastructure Development Surcharge (SIDS), Service Tax, other direct and indirect taxes and surcharge of any nature whatsoever by whatever name called whatsoever which is imposed by the Government of Pakistan and/or the Government of Sindh at the time of filing of Tariff application or are applicable or may become applicable hereafter are not being considered in the calculation of Tariff and the same shall be claimed under Tariff as and when paid before COD.

9.5 Pre-COD Insurance

Pre-COD insurance cost covers the insurance cost of Project Company's assets during construction as well as the cost incurred prior to COD. These cost estimates have been developed based on recent tariff determinations of various wind power project by NEPRA. NEPRA allows 1.35% of the EPC Cost as Pre-COD Insurance Cost.

Project Company will solicit offers from leading local insurance companies and international leading insurance companies in due course.

The Project Company, in view of the practices set by the other IPPs in Pakistan and in accordance with the requirements set out by the lenders funding the project, intends to procure following insurances during the construction phase of the Project;

- ☐ Construction, erection all risk insurance (CEAR)/ Third party liability
- ☐ Marine cargo - delay - in startup insurances
- ☐ Terrorism insurance
- ☐ Workmen's compensation insurance
- ☐ Group personal accident
- ☐ Motor comprehensive insurance

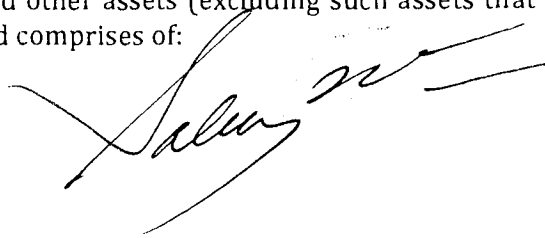
Pre-COD Insurance is assumed as 1.35% of EPC Cost.

9.6 Non-EPC Cost

The Non-EPC Cost includes the cost of items that are not part of the EPC Contractor's scope of work pursuant to the executed EPC Contracts.

A) Fixed Assets

This includes cost of various instruments, equipment, and other assets (excluding such assets that are supplied under On-shore and Off-shore Contracts) and comprises of:

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- a) vehicles, office equipment, furniture, electrical appliances;
- b) wind measurement mast (instruments, lattice tower, calibration, security, maintenance, and insurance) as required under EPA; and
- c) Telecommunication equipment

B) Residential facility

Being a foreign owned company coming into Pakistan, Project Company requires rented accommodation in Karachi for the permanently resident officers and staff. Since the Project Site is not too far from Karachi hence there is no intention to build a full-fledged residential colony at the site except a few rooms hostel.

C) Security Arrangement Cost

Pakistan is going through a tough time with respect to security situation in the country. This is one of the major impediments to attracting foreign investments. The Project Company is also concerned about the security of its personnel. Therefore, security arrangement cost becomes one of the important components of the Project Cost. This represents the costs associated with providing security at offices, accommodation, and site; and also including for expatriates engaged by Sponsors, lenders, and contractors for the Project. The Project Company has hired the services of a dedicated security manager to oversee and monitor the security related matters along with other security staff.

D) Optic Fiber / Communication Link Cost with WAPDA

In accordance with the requirements of EPA, the Project Company is required to provide connectivity to the Power Purchaser through fiber optic. Total installment cost (including equipment, materials, and installation) has been included under this head. This communication link is essential as the Project is bound to transmit wind speed and power output data to the Power Purchaser for record of data in line with EPA requirements.

Break Up of Non-EPC Cost is given below;

Non-EPC cost		US\$
A) Fixed Assets		
	Wind measurement masts	70,230
	Recalibration of wind mast	25,000
	Vehicles	150,000
	Furniture and Electronic Equipment	20,000
	Telecommunication equipment	15,000
	Misc	50,000
		330,230
	B) Residential facility	100,000
	C) Access road	65,000
	D) Security Arrangement Cost	100,000
	E) Optic fiber/Communication link with WAPDA	200,000
TOTAL NON-EPC COST		795,230

9.7 Project Development Cost



The Project Development Cost includes the costs incurred for the purpose of project development and includes all cost, fees, and expenses incurred or to be incurred for such purpose. These costs mainly include the following;

- ☐ Feasibility study costs
- ☐ Government permits and licenses fees
- ☐ Costs related to the guarantees which have been furnished or to be furnished to AEDB
- ☐ Costs incurred or to be incurred for Project Company incorporation and capitalization
- ☐ Consultants fees
- ☐ Human resources cost
- ☐ Cost of travel

Feasibility study : It includes wind measuring mast, technical feasibility, electrical and grid inter-connection studies, and geo-technical, & topographical studies.

It also includes construction supervision engineer during pre-COD period.

Government permits and licenses fee : It includes various fees to AEDB, NEPRA, NTDC, and Environment Protection Agency (EPA) of Government of Sindh.

It also includes bank guarantee charges for obtaining LOI from AEDB, performance guarantee charges for issuance of LOS, and seller's L/C to NTDC charges under EPA.

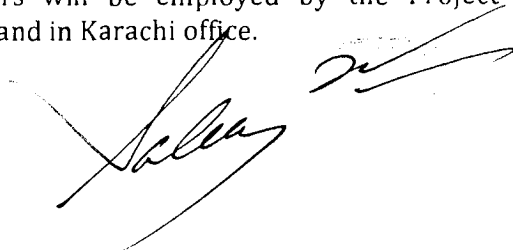
Project Company incorporation and capitalization fee to SECP : The fees relating to Project Company incorporation and capitalization incurred on registration of authorized capital of the Project Company with the Securities and Exchange Commission of Pakistan (SECP) are included in this cost head.

Project consulting and advisory fees : The technical, financial and legal consultants, and advisors costs to be incurred by the Project Company during the project development phase are included in this cost head

HR Cost : The HR costs include salaries, wages, and benefits of all staff as follows;

- ☐ Management executives
- ☐ Technical and operations department
- ☐ Commercial and legal affairs department
- ☐ Mt department
- ☐ Finance department
- ☐ Training and human resource department
- ☐ Supply and logistic departments


These staff members will be employed by the Project Company at the site and in Karachi office.



Travel and related cost : The Project Company is incurring and will also incur domestic and international travelling expenses including accommodation cost during development and construction phases of the Project.

Break up of Project Development Cost is given below;

Project development cost		US\$
i) Feasibility cost		
	Topographic survey	6,130
	Soil study	5,400
	Detailed Geo-technical & Seismic studies	40,000
	Environmental impact assessment	10,000
	Logistic studies	1,000
	Grid study (Load Flow Study)	10,000
	Wind assessment - Riso	20,000
	Wind resource assessment	30,000
	Technical Consultant	120,000
	CDM Consultant	50,000
	Lawyer	200,000
	Owners Engineer	800,000
	Financial Consultant	952,941
	Lenders – Advisors	400,000
	Miscellaneous	50,000
i) TOTAL Feasibility cost		2,695,471
ii) Permits/License		
	Generation license	2,156
	Tariff application fee	2,874
	Annual license fee	10,000
	Fee for LOI	7,100
	Fee for LOS	50,000
	Environmental Protection Agency (GoS) fee	100
ii) TOTAL Permits/License COST		72,230
iii) Company formation fee		
	Registration of authorized capital	20,000
	Audit fee yearly	20,000
iii) TOTAL Company formation fee		40,000
iv) Project consultants - Developers fee		200,000
v) Project administration costs		200,000
vi) HR costs		200,000
vii) Travelling expenses		150,000
TOTAL PROJECT DEVELOPMENT COST		3,557,701



SECTION-10

PROJECT FUNDING

10.1 Introduction

Total Capital Cost of the Project is estimated to be approximately USD 40,529,424 inclusive of IDC. The Project cost will be financed by a combination of Loan and equity.

The capital structure of the Company is envisaged at a Loan~Equity ratio of 75:25 thus resulting in USD 30,397,068 and USD 10,132,356 as Loan and equity respectively.

Sources of Funds are as follows;

Sources of Funds	% of Project	
	Cost	USD
Loan	75%	30,397,068
Equity	25%	10,132,356
Total Project Cost with IDC	100%	40,529,424

10.2 Loan Structure

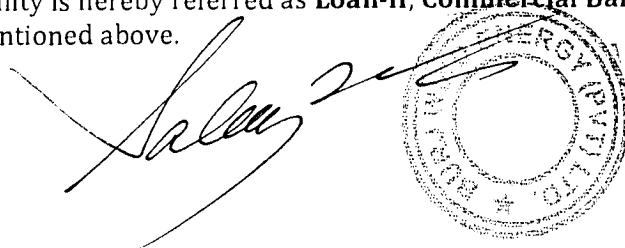
Under the proposed financing structure, Loan will account for 75% i.e. approximately USD 30.397 million, of the total Project Cost including Interest During Construction ("IDC"). Loan disbursements are dependent on actual payments to be made to the EPC Contractor.

a) Local Currency Loan

Entire loan will come from local banks in Pak Rupees. The Project will utilize a mix of available financing options. Note that the recommended financing structure and associated terms in this application/proposal are based on preliminary responses received recently by the Project Company from the financial markets. In current volatile environment, it is critical to recognize that the financing structure and associated terms are subject to adverse changes in the financial markets and Project parameters.

In order to promote renewable energy projects in the country, State Bank of Pakistan ("SBP") is providing financing for the establishment of new power projects using renewable energy. SBP vide its circular no. SMEFD Circular No. 19 of 2009 dated December 01, 2009 and IH&SMEFD Circular Letter No. 11 of 2012 dated July 30, 2012 issued a scheme for financing power plants using renewable energy.

Project Company has decided to avail the loan facility for renewable projects of SBP. Loan under SBP Facility is hereby referred as **Loan-I, SBP Facility**. Under the terms and conditions of SBP Facility, this financing is only available for the purchase of new imported and locally manufactured plant, machinery and equipment. As project cost not only comprises of imported and locally manufactured plant, machinery and equipment but also includes civil work, land and site preparation costs, duties and taxes, insurance costs and Interest cost and related financing charges during construction, etc. therefore, in addition to the SBP Facility, Project Company is also arranging a certain portion of loan from the Commercial Banks. Loan under Commercial Banks facility is hereby referred as **Loan-II, Commercial Banks** and is being arranged to cover the gap as mentioned above.



The breakdown of loan is given below;

Description	USD	Pak Rupee
Loan-I, SBP Facility	23,500,000	2,293,600,000
Loan-II, Commercial Banks	6,897,068	673,153,794
	30,397,068	2,966,753,794

b) Interest on Loan

Interest payments will start after the commencement of operations of the wind farm and will be made on quarterly basis. Interest will be calculated on the basis of actual number of days elapsed in a year of 365 days on the outstanding principal amount of the Facility.

i) Loan-I SBP Facility:

Under the terms and conditions of SBP Facility, the rate of service charges once fixed will remain locked-in for the entire duration of the loan.

Project Company has taken 11.40% (i.e. fixed rate of interest) on SBP Facility for calculating interest during construction and interest payments after the end of the grace period.

Fixed Interest Rate is given below;

SBP Rate	:	8.40%
Spread	:	3.00%
Fixed Interest rate	:	11.40%

NOTE:

i) Since interest rate of Loan-I, SBP Facility is fixed throughout the term of Loan-I, therefore no adjustment is and will be claimed on account of variation of SBP rate during the term of the Loan-I, SBP Facility.

ii) Entire benefit will be passed on to the power purchaser, in case final interest rate is lower than the rate used for the calculation of tariff.

iii) Fixed Interest rate will be finalized at the time of Financial Closure.

ii) Loan-II, Commercial Banks:

Interest rate of Commercial Banks will be linked with KIBOR thus it will vary as and when there is a change in KIBOR. Project Company has taken 13.21% interest rate on Commercial Banks facility for calculating interest during construction and interest payments after the end of the grace period.

Interest Rate is given below;

KIBOR	:	10.21% (3months - Offer dated October 01, 2014)
Spread	:	3.00%
Interest rate	:	13.21%

NOTE:

Interest rate is KIBOR based thus interest rate will change as and when there is a change in KIBOR.

c) Grace Period and Loan Term



i) Grace Period

Grace period starts from the date banks first disburse the funds to the Project Company. The loans will be obtained with a grace period of 2 years i.e. 24 months (covering 15 months of construction) and first year of operations.

IDC is an estimated figure, however, IDC is subject to change depending on the fluctuations in KIBOR and exchange rate, drawdown schedule and changes in the Project Cost. IDC will be calculated for the period starting from the first drawdown of loan after the financial closure based on accrued interest for the outstanding loan on monthly basis.

As mentioned above, grace period is of 24 months, out of which 12 months will be utilized during construction of the wind farm and remaining 12 months will fall in the first year of operations (hereby referred as "**Post-COD grace period**"). Interest on loans (Loan-I, SBP Facility, Loan-II, Commercial Banks) will not be paid during the construction period and will be part of the Total Project Cost (that is referred as IDC in this application) however, interest will be paid to banks on quarterly basis during the first year of operations i.e. Post-COD grace period whereas repayment of Principal will start once grace period of 24 months ends i.e. from 2 year of operations along with the interest on loans (Loan-I, SBP Facility, Loan-II, Commercial Banks).

Interest to be paid to banks during the Post-COD grace period is part of the tariff.

ii) Loan Term

Repayment period of both Loan-I and Loan-II will be eight (08) years starting from the end of the grace period.

d) Hedging Cost

One of the terms and conditions of SBP Facility is that SBP will not consider the request of bank(s)/DFI(s) to enhance the amount of funding of the project due to depreciation of Pak Rupee during the availability period of the facility.

SBP Facility says that the risk of enhanced financing requirements would either be borne by the borrower or by the bank on same terms upon which refinance has been obtained. Due to this, Lenders require that borrower hedges changes in US Dollar and Pak Rupee exchange rate from financial closure date till the date of commencement of commercial operations (COD).

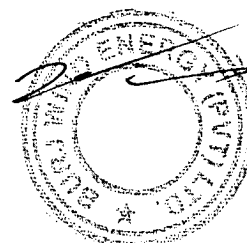
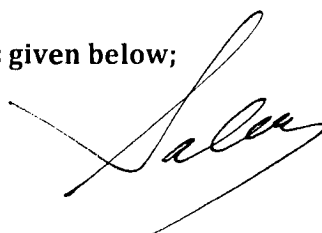
The tariff model has assumed cost of hedging against the movements in exchange rate between US Dollar and Pak Rupee prior to COD on the purchase of plant and equipment.

Project Company will not claim adjustment in the Off-shore EPC Cost component and resultant tariff due to the movements in the foreign exchange rate at the time of COD. However, all other foreign currency costs will be adjusted accordingly at the time of COD due to changes in exchange rates.

5.36% of Total Loan-I is assumed as hedging cost in the tariff and will be finalized at Financial Close. This cost is a part of the financial charges.

e) Terms and Conditions

A summary of key terms and conditions is given below;



Terms and conditions	Loan-I, SBP Facility	Loan-II, Commercial Banks
Base Currency	Pak Rupees	Pak Rupees
Amount (in Pak Rs.)	2,293,600,000/-	673,153,794/-
Total Tenor	2+ 8 Years	2+ 8 Years
Nature of Interest Rate	Fixed	Variable
Benchmark Rate	SBP rate	KIBOR
Margin over Benchmark Rate	300 bps	300 bps
Total Interest Rate	11.40%	13.21%
Upfront/ Arrangement Fee	2%	2%
Commitment Fee	0.5%	0.5%
Hedging Cost	5.36%	Not required

f) Financial Charges

Financial charges cover the costs related to the financing of the Project. Such costs include lenders' up-front/Arrangement fee, commitment fee, hedging cost and other related costs.

Lenders take one time upfront/arrangement fee before the first disbursement.

Commitment fee is charged by the lenders on the undrawn balance of the loan facility. The commitment fee is calculated according to the loan schedule of the Project Company.

The financial charges will be negotiated with the lenders at the time of issuance of term sheet by the lenders.

Financial fees and charges	Rs.	
Arrangement Fee	59,335,076	Calculated as per loan amount
Commitment fee	8,065,862	Calculated as per loan schedule
LC commission	21,472,000	Estimated amount (\$220,000)
TOTAL - Financial fees and charges	88,872,938	
Hedging Cost	122,936,960	For details, refer to 10.2 (d)

g) Loan Schedule

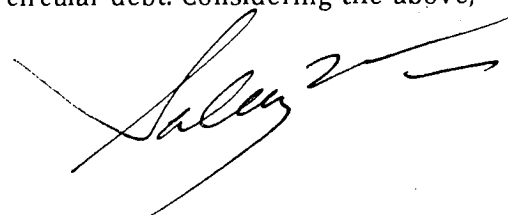
Loan schedules of Loan-I and Loan-II are given in Schedule 13.

10.3 Equity Structure

It is estimated that 25% of the total capital cost of the Project i.e. approximately Rs. 988,917,931 (i.e. USD 10.13 million) will be funded by the Sponsors in the form of equity.

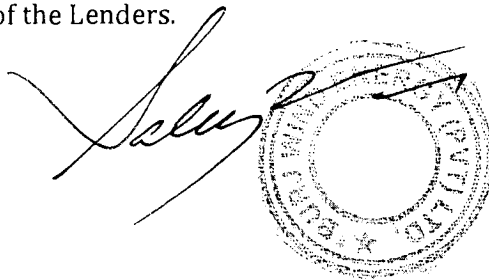
Sponsors of the Company are funding the development cost and will pay other fees payable on or before the Financial Closure.

Risk perceptions are high in investing in Pakistan's energy sector not only because of the security situation of the country but also considering the issue of the circular debt. Considering the above,



Project Company is filing tariff petition with NEPRA under the Cost-plus regime at a fixed IRR of 17%.

Sponsors reserve the right to sell certain percentage of shares of the Project Company to other investors in future, subject to the requirements of the Lenders.

A handwritten signature in cursive script, appearing to read "S. S. S.", is written over a circular stamp. The stamp contains the text "NEPRA" at the top and "17%" at the bottom, with a star in the center.

SECTION-11

O&M COST INCLUDING INSURANCE

11.1 O&M Cost

NEPRA issued wind upfront tariff in April 2013 and allowed O&M Cost of Rs. 1.6040 per kWh, which is assumed in the tariff application by the Project Company.

O&M expenses are one of the major unknowns for the wind developers in Pakistan. It is imperative to note that O&M costs are not as low in wind projects as perceived by many. Today's modern wind turbines are built from over 8,000 different components. Furthermore, unexpected components failure, especially electronic controls, generators, rotor blades etc have driven up operations and maintenance costs. This is even more critical in Pakistan where the temperatures in the windy months are also very high and machines have to work in almost full capacity in extreme weathers. Yet these maintenance costs are lesser as compared to overhauling and fuel costs of thermal generators.

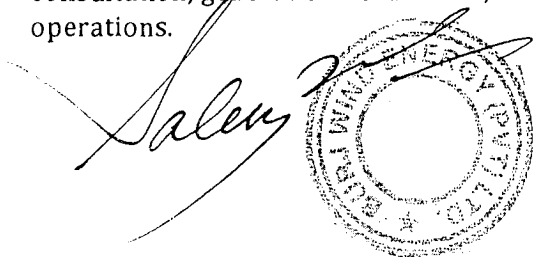
11.2 Outsource of O&M during Operations

Project Company is in discussion with WTG supplier of the Project to provide O&M services during the operations under an O&M Contract. The O&M price includes the costs associated with daily operation, scheduled maintenance, routine maintenance, services required for unscheduled maintenance, and any spare parts and consumables required for carrying out the scheduled and routine maintenance.

11.3 Other operating cost

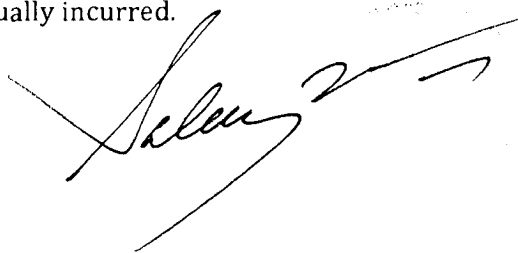
O&M Cost also includes the following;

- i) **Fixed Assets:** This includes cost of vehicles, office equipment, furniture, electrical appliances, and tools required at site.
- ii) **Payroll and Allied Expenses:** Payroll costs include salaries and benefits of corporate office (CEO, CFO, COO etc...). These staff members will be employed by the Project Company at the site and in Karachi office.
- iii) **Security Arrangement Cost:** Due to volatile law and order situation, security arrangements are very important and a vital subject. The Project will depute a full time security team at its site office. The foreign staff of manufacturers and investors who visits or will visit the Project Site for work will also be provided security cover during their stay in Pakistan.
- iv) **Vehicle Fuel and Maintenance:** This component includes the costs associated with running and maintenance of vehicles at the Karachi and site offices of the Project Company. The vehicles include vehicles required by the security personnel for securing the site; vehicles required for supervision and coordination of O&M activities, vehicles for administration needs. The vehicles purchased during the construction period will be used for first 5 years of the O&M period. At the start of the 6th year, the old vehicles will retire and new vehicles will be procured by the Project Company in each year as depreciated and worn off vehicles will be laid off.
- v) **Administration Costs:** This portion of the O&M cost includes costs associated with rents, utilities, travelling, entertainment, audit, legal and financial consultants, technical consultation, generation license fees, and other allied expenses of running the offices during operations.



11.4 Insurance

Project has assumed 1.35% of the EPC Price as insurance cost. Insurance cost component of tariff will be adjusted only on account of US \$/PKR exchange rate variation annually, not exceeding the insurance cost actually incurred.

A handwritten signature in black ink, appearing to be 'Saleem', with a long horizontal stroke extending to the right.

SECTION-12

INDEXATIONS, ESCALATIONS AND ADJUSTMENT

12.1 Indexation

Various components of tariff are adjusted on pre-determined formula and reference parameters. IPPs are not required to approach NEPRA for tariff indexation. The purpose of indexation is to remove any exposure of investors to cost escalations, over the life of the 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/ Alternate Energy Development Board's, guidelines for determination of tariff for wind power generation 2006", NEPRA's recent determinations and the provisions of the standard drafts of the implementation agreement and the energy purchase agreement.

12.1.a Foreign Exchange

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

- ☐ O&M component;
- ☐ The insurance component as discussed previously will provide cover on a replacement cost basis, which will be incurred in US dollars. Premium will therefore be constructed on that basis, and insurance cost will therefore fluctuate with exchange rate movements;
- ☐ The ROE and ROEDC component that reflects the equity investment in foreign currency (USD).

Indexation for these components will be applied quarterly, on January 1, April 1, 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 \$). In the event of discontinuation of TT&OD selling rate by the NBP or introduction of another regime by the State Bank of Pakistan (SBP) for determination of the exchange rate, NEPRA will be asked to substitute the mechanism with another mechanism thus it does not place the Project Company in a worse position.

12.1.b KIBOR

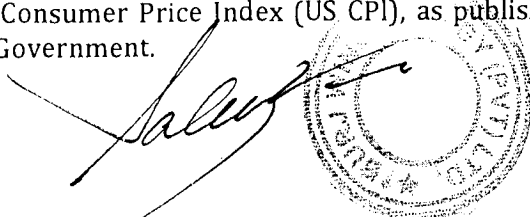
The wind farm investors have no control over changes in interest rates. Appropriate indexation will be applied.

Since Interest Rate of Loan-I is fixed throughout the term of Loan-I, therefore no adjustment will be claimed on account of variation of SBP rate during the term of the Loan-I.

Loan-II will be adjusted with the changes in Karachi Interbank Offer Rate (KIBOR). This portion will be adjusted bi-annually for variations in the 6 month KIBOR.

12.1.c Foreign Inflation

O&M component is denominated in US Dollars thus will be adjusted with changes in US inflation, United States Consumer Price Index (US CPI), as published monthly by the department of Labor, United States Government.



A summary of indexation requested is given below; Different components of the tariff are escalated/ indexed on the following basis;

Energy Payment	Variation in...
Fixed O&M	US CPI & USD
Insurance	USD
Return On Equity & Return on Equity During Construction	USD
Loan-II Commercial Banks	KIBOR

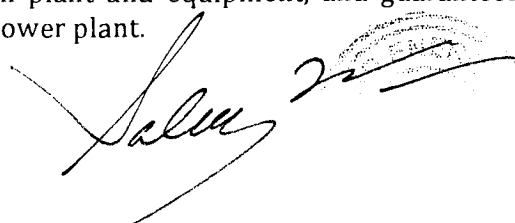
12.2 Indexation and Adjustment Factors

Indexations and adjustment factors will be determined by NEPRA from time to time (for each Quarter, Semi-Annual Period or the year, as applicable) and notified in the official gazette by government of Pakistan.

From and after the Commercial Operations Date, indexation formulas as given in the standardized Energy Purchase Agreement (EPA) duly issued by AEDB will be applied.

12.3 Fiscal Incentives

GoP is offering a number of fiscal incentives under the policy framework. These fiscal incentives include exempting private power companies from corporate income tax, relief from import duties on plant and equipment, and guaranteed repatriation of equity and dividends derived from the power plant.

A handwritten signature in black ink is written over a circular official stamp. The signature appears to be 'Salim' followed by a flourish. The stamp is partially obscured by the signature.

SECTION-13

PROJECT TARIFF

Based on certain assumptions, below tariff is calculated @ P50.

Year	O&M Rs/kwh	Insurance Rs/kwh	RoE Rs/kwh	RoE-DC Rs/kwh	Loan-I Rs/kwh	Loan-II Rs/kwh	Tariff Rs/kwh
1	1.6040	0.9628	4.1203	0.7005	4.5980	1.5637	13.5493
2	1.6040	0.9628	4.1203	0.7005	10.3361	3.2253	20.9490
3	1.6040	0.9628	4.1203	0.7005	10.3361	3.2253	20.9490
4	1.6040	0.9628	4.1203	0.7005	10.3361	3.2253	20.9490
5	1.6040	0.9628	4.1203	0.7005	10.3361	3.2253	20.9490
6	1.6040	0.9628	4.1203	0.7005	10.3361	3.2253	20.9490
7	1.6040	0.9628	4.1203	0.7005	10.3361	3.2253	20.9490
8	1.6040	0.9628	4.1203	0.7005	10.3361	3.2253	20.9490
9	1.6040	0.9628	4.1203	0.7005	10.3361	3.2253	20.9490
10	1.6040	0.9628	4.1203	0.7005	-	-	7.3876
11	1.6040	0.9628	4.1203	0.7005	-	-	7.3876
12	1.6040	0.9628	4.1203	0.7005	-	-	7.3876
13	1.6040	0.9628	4.1203	0.7005	-	-	7.3876
14	1.6040	0.9628	4.1203	0.7005	-	-	7.3876
15	1.6040	0.9628	4.1203	0.7005	-	-	7.3876
16	1.6040	0.9628	4.1203	0.7005	-	-	7.3876
17	1.6040	0.9628	4.1203	0.7005	-	-	7.3876
18	1.6040	0.9628	4.1203	0.7005	-	-	7.3876
19	1.6040	0.9628	4.1203	0.7005	-	-	7.3876
20	1.6040	0.9628	4.1203	0.7005	-	-	7.3876
Levelized Tariff (Rs)	1.6040	0.9628	4.1203	0.7005	6.3792	2.0043	15.7711
Levelized Tariff (US Cents)	1.6434	0.9865	4.2216	0.7177	6.5360	2.0536	16.1589

1US Dollar = 97.60 Pak Rupees

Project Company has asked for a Levelized Tariff of Rs. 15.7711 per kWh (US Cents 16.1589 per kWh), whereas NEPRA issued Levelized wind upfront tariff of Rs. 16.2926 per kWh (US Cents 16.6932 per kWh) in April 2013 on 100% rupee financing. Project Company's tariff is lower than the last issued wind upfront tariff.

Key parameters are given below:

Capacity (MW)	13.50
Plant specific plant factor	36.1%
Units produced in a year (GWh)	42.65
Dollar rate	97.60
Total Project cost (US\$)	40,529,423
Total Project cost (Rs.)	3,955,671,726

Debt %	75%
Equity %	25%
Loan-I (SBP Facility) (for equipment only) (Rs.)	2,293,600,000
Interest Rate	11.40%
Debt Term (Years)	8
No of payments in a year	4
Installment (Rs.)	95,978,300
Loan-II (C-Banks) (Rs.)	673,153,794
Interest Rate	13.21%
Debt Term (Years)	8
No of payments in a year	4
Installment (Rs.)	31,648,612

Repayment Schedule of Loan-I, SBP Facility is given below;

Quarters	Opening Principle	Principle	Interest	Installment	Closing Principle
Grace Period	2,293,600,000		65,367,600		2,293,600,000
Grace Period	2,293,600,000		65,367,600		2,293,600,000
Grace Period	2,293,600,000		65,367,600		2,293,600,000
1	2,293,600,000	44,841,474	65,367,600	110,209,074	2,248,758,526
2	2,248,758,526	46,119,456	64,089,618	110,209,074	2,202,639,070
3	2,202,639,070	47,433,861	62,775,213	110,209,074	2,155,205,209
4	2,155,205,209	48,785,726	61,423,348	110,209,074	2,106,419,484
5	2,106,419,484	50,176,119	60,032,955	110,209,074	2,056,243,365
6	2,056,243,365	51,606,138	58,602,936	110,209,074	2,004,637,227
7	2,004,637,227	53,076,913	57,132,161	110,209,074	1,951,560,314
8	1,951,560,314	54,589,605	55,619,469	110,209,074	1,896,970,708
9	1,896,970,708	56,145,409	54,063,665	110,209,074	1,840,825,300
10	1,840,825,300	57,745,553	52,463,521	110,209,074	1,783,079,747
11	1,783,079,747	59,391,301	50,817,773	110,209,074	1,723,688,445
12	1,723,688,445	61,083,953	49,125,121	110,209,074	1,662,604,492
13	1,662,604,492	62,824,846	47,384,228	110,209,074	1,599,779,646
14	1,599,779,646	64,615,354	45,593,720	110,209,074	1,535,164,292
15	1,535,164,292	66,456,892	43,752,182	110,209,074	1,468,707,400
16	1,468,707,400	68,350,913	41,858,161	110,209,074	1,400,356,487
17	1,400,356,487	70,298,914	39,910,160	110,209,074	1,330,057,573
18	1,330,057,573	72,302,433	37,906,641	110,209,074	1,257,755,139
19	1,257,755,139	74,363,053	35,846,021	110,209,074	1,183,392,087
20	1,183,392,087	76,482,400	33,726,674	110,209,074	1,106,909,687
21	1,106,909,687	78,662,148	31,546,926	110,209,074	1,028,247,539
22	1,028,247,539	80,904,019	29,305,055	110,209,074	947,343,520
23	947,343,520	83,209,784	26,999,290	110,209,074	864,133,736

24	864,133,736	85,581,263	24,627,811	110,209,074	778,552,474
25	778,552,474	88,020,329	22,188,745	110,209,074	690,532,145
26	690,532,145	90,528,908	19,680,166	110,209,074	600,003,237
27	600,003,237	93,108,982	17,100,092	110,209,074	506,894,255
28	506,894,255	95,762,588	14,446,486	110,209,074	411,131,668
29	411,131,668	98,491,822	11,717,253	110,209,074	312,639,846
30	312,639,846	101,298,838	8,910,236	110,209,074	211,341,008
31	211,341,008	104,185,855	6,023,219	110,209,074	107,155,152
32	107,155,152	107,155,152	3,053,922	110,209,074	(0)

Repayment Schedule of Loan-II, Commercial Banks is given below;

Quarters	Opening Principle	Principle	Interest	Installment	Closing Principle
Grace Period	673,153,794		22,230,904		673,153,794
Grace Period	673,153,794		22,230,904		673,153,794
Grace Period	673,153,794		22,230,904		673,153,794
1	673,153,794	12,158,415	22,230,904	34,389,319	660,995,379
2	660,995,379	12,559,946	21,829,372	34,389,319	648,435,433
3	648,435,433	12,974,739	21,414,580	34,389,319	635,460,695
4	635,460,695	13,403,229	20,986,089	34,389,319	622,057,465
5	622,057,465	13,845,871	20,543,448	34,389,319	608,211,594
6	608,211,594	14,303,131	20,086,188	34,389,319	593,908,464
7	593,908,464	14,775,492	19,613,827	34,389,319	579,132,972
8	579,132,972	15,263,452	19,125,866	34,389,319	563,869,520
9	563,869,520	15,767,528	18,621,791	34,389,319	548,101,992
10	548,101,992	16,288,250	18,101,068	34,389,319	531,813,741
11	531,813,741	16,826,170	17,563,149	34,389,319	514,987,571
12	514,987,571	17,381,854	17,007,465	34,389,319	497,605,717
13	497,605,717	17,955,890	16,433,429	34,389,319	479,649,827
14	479,649,827	18,548,883	15,840,436	34,389,319	461,100,944
15	461,100,944	19,161,460	15,227,859	34,389,319	441,939,484
16	441,939,484	19,794,267	14,595,051	34,389,319	422,145,217
17	422,145,217	20,447,973	13,941,346	34,389,319	401,697,244
18	401,697,244	21,123,267	13,266,051	34,389,319	380,573,977
19	380,573,977	21,820,863	12,568,456	34,389,319	358,753,113
20	358,753,113	22,541,497	11,847,822	34,389,319	336,211,616
21	336,211,616	23,285,930	11,103,389	34,389,319	312,925,686
22	312,925,686	24,054,948	10,334,371	34,389,319	288,870,738
23	288,870,738	24,849,363	9,539,956	34,389,319	264,021,376
24	264,021,376	25,670,013	8,719,306	34,389,319	238,351,363
25	238,351,363	26,517,765	7,871,554	34,389,319	211,833,598
26	211,833,598	27,393,514	6,995,805	34,389,319	184,440,084
27	184,440,084	28,298,185	6,091,134	34,389,319	156,141,899
28	156,141,899	29,232,733	5,156,586	34,389,319	126,909,166
29	126,909,166	30,198,144	4,191,175	34,389,319	96,711,023
30	96,711,023	31,195,437	3,193,882	34,389,319	65,515,586

[Signature]

[Circular Stamp: THE GOVERNMENT OF PUNJAB, 1998, 10/11/2018]

31	65,515,586	32,225,667	2,163,652	34,389,319	33,289,919
32	33,289,919	33,289,919	1,099,400	34,389,319	(0)

Calculation of Equity IRR is given below;

IRR=	17.00%
-1	(988,917,931)
1	175,730,716
2	175,730,716
3	175,730,716
4	175,730,716
5	175,730,716
6	175,730,716
7	175,730,716
8	175,730,716
9	175,730,716
10	175,730,716
11	175,730,716
12	175,730,716
13	175,730,716
14	175,730,716
15	175,730,716
16	175,730,716
17	175,730,716
18	175,730,716
19	175,730,716
20	175,730,716

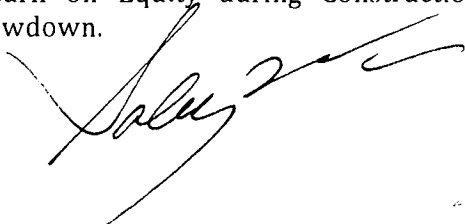
ADJUSTMENTS AT COD

NEPRA is requested to allow the adjustments (as set out in this Section (Adjustments at COD)) to the Reference Generation Tariff at the time of true up at COD;

ADJUSTMENTS TO PROJECT COST

It is submitted that the Project Cost be adjusted: at COD for the following assumptions. The adjustments to the Project Cost to be reflected in the relevant tariff components (Return on Equity and Loan Servicing):

- US\$ / PKR exchange rate variations during the construction period;
- All such Project Cost, which are subject to be adjusted, as per actual
- All local Duties and Taxes paid or withheld;
- Arrangement and commitment fee charges and any other fees/charges by the Lenders of the Project;
- Interest during Construction for increase in Project Cost, change in interest base rate (KIBOR), variation in loan & equity drawdowns;
- Return on Equity during Construction (ROEDC; IRR based) based on actual equity drawdown.



Pass-Through Items

In addition to the pass-through items stipulated in the standardized EPA (with its Schedules) and in the Petition herein, any taxes, duties and levies etc. not factored in the tariff calculation will be treated as part of the Project cost at the time of COD. Any direct and indirect taxes (federal and provincial) taxes currently applicable or impose before and after COD of the Project on the O&M Operator will be considered as Pass Through Item as per the terms of EPA.

Power Purchase Prior to COD

It is standard practice for wind power projects internationally to come online one WTG at a time, thereby, enabling the wind farm to commence dispatching energy to the grid as soon as a WTG is capable of power generation. Commissioning of a WTG cannot be completed without the substation being completed, tested and commissioned, therefore, all protection and safety equipment required to ensure smooth, safe operation of the wind farm (and the grid) would already be in place prior to commissioning of the WTGs. As soon as a WTG has been commissioned, it is ready to supply energy to the grid. It is requested that compensation from NTDC be allowed for the supply of electricity prior to achievement of COD.

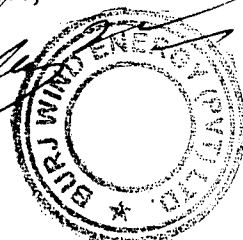
NEPRA is therefore requested to allow the Project to claim compensation from the Power Purchaser for all electricity supplied into the grid system prior to achievement of COD at the tariff rate applicable for the first year of operation minus the Loan servicing components of the tariff.

In case the Project is not allowed to claim compensation, there will be no motivation for the Project to supply energy into the grid, which could otherwise assist in reducing the demand-supply gap.

General Assumptions

The Petitioner's proposed tariff has been worked on the basis of following non-exhaustive list of assumptions - any change in relation thereto will require an appropriate adjustment in the proposed tariff:

1. Project cost of \$40,529,423 and Loan~Equity ratio of 75~25.
2. Annual energy yields are calculated for exceeding probability levels @ P50 and units produced in a year are 42,651MWh.
3. The Power Purchaser will assume wind risk and will pay at least benchmark energy on a monthly basis. Bonus on energy over and above the benchmark energy by the Project will be shared between the Project Company and Off-taker as per the RE Policy of 2006.
4. Insurance during construction is 1.35% of EPC Cost.
5. 100% of Loan has been assumed to be financed through local banks and financial institutions.
6. Fixed interest rate of 11.40% on Loan-I, SBP Facility.
7. Interest rate for Loan-II-Commercial Banks is assumed at 13.21%.
8. IRR of 17% is assumed (exclusive of 7.5% withholding tax on dividends) over 20 years. The ROEDC will be accrued at the time of COD according to the actual schedule of equity injection.
9. Return on Equity for the construction and commissioning period, will be adjusted on IRR basis at the time of COD according to the actual Equity disbursement during such period
10. Exchange Rate (PKR/US\$) is taken @ PKR 97.60 per US\$.
11. Taxes (Federal, Provincial, Local or district), stamp duties and levies etc. are not factored in the tariff calculation and will be claimed separately under Tariff thereafter project cost in



Monthly net energy yield at P50, P75, P90 and P99 for actual wind condition is shown in below Table;

Month	Uncertainty	PoE [MWh/a]			
	[%]	50%	75%	90%	99%
Jan	15.5%	2,017	1,806	1,617	1,291
Feb	15.5%	2,486	2,227	1,993	1,591
Mar	15.5%	2,884	2,583	2,312	1,846
Apr	15.5%	3,300	2,956	2,646	2,112
May	15.5%	7,084	6,344	5,679	4,534
Jun	15.5%	4,256	3,812	3,412	2,724
Jul	15.5%	5,848	5,238	4,688	3,743
Aug	15.5%	4,655	4,169	3,732	2,979
Sep	15.5%	3,331	2,983	2,670	2,132
Oct	15.5%	1,940	1,738	1,555	1,242
Nov	15.5%	2,101	1,882	1,685	1,345
Dec	15.5%	2,750	2,463	2,205	1,760
		42,651	38,200	34,194	27,300

PoE - Monthly net yield (Actual wind condition)

Source: WRA

Monthly net energy yield at benchmark wind conditions with energy losses is shown in below Table;

Months	Wake Reduced Energy [MWh]	Availability	Turbine Performance	Electrical	Environmental	Curtailment	Total Loss	Net Energy [MWh]
Jan	2,211	5.0%	0.6%	2.0%	0.6%	0.0%	8.1%	2,033
Feb	2,141	5.0%	0.6%	2.0%	0.6%	0.0%	8.1%	1,969
Mar	2,605	5.0%	0.6%	2.0%	0.6%	0.0%	8.1%	2,395
Apr	4,514	5.0%	0.6%	2.0%	0.6%	0.0%	8.1%	4,150
May	7,272	5.0%	0.6%	2.0%	0.6%	0.0%	8.1%	6,686
Jun	7,877	5.0%	0.6%	2.0%	0.6%	0.0%	8.1%	7,243
Jul	6,575	5.0%	0.6%	2.0%	0.6%	0.0%	8.1%	6,045
Aug	7,205	5.0%	0.6%	2.0%	0.6%	0.0%	8.1%	6,625
Sep	4,482	5.0%	0.6%	2.0%	0.6%	0.0%	8.1%	4,121
Oct	1,351	5.0%	0.6%	2.0%	0.6%	0.0%	8.1%	1,242
Nov	1,173	5.0%	0.6%	2.0%	0.6%	0.0%	8.1%	1,079
Dec	2,018	5.0%	0.6%	2.0%	0.6%	0.0%	8.1%	1,855
	49,424	5.0%	0.6%	2.0%	0.6%	0.0%	8.1%	45,443

Monthly energy yield (Benchmark)

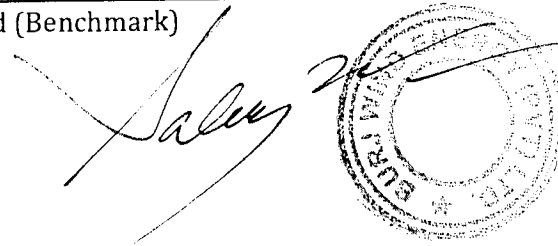
Source: WRA

Monthly net energy yield at P50, P75, P90 and P99 for benchmark wind condition is shown in below Table;

Month	Uncertainty	PoE [MWh/a]			
	[%]	50%	75%	90%	99%
Jan	13.0%	2032.93	1854.69	1694.28	1418.20
Feb	13.0%	1968.56	1795.98	1640.64	1373.30
Mar	13.0%	2395.19	2185.20	1996.20	1670.92
Apr	13.0%	4150.44	3786.56	3459.06	2895.41
May	13.0%	6686.31	6100.11	5572.51	4664.47
Jun	13.0%	7242.58	6607.61	6036.12	5052.54
Jul	13.0%	6045.45	5515.43	5038.40	4217.40
Aug	13.0%	6624.71	6043.91	5521.17	4621.50
Sep	13.0%	4121.02	3759.72	3434.54	2874.89
Oct	13.0%	1242.19	1133.28	1035.27	866.57
Nov	13.0%	1078.53	983.97	898.87	752.40
Dec	13.0%	1855.47	1692.80	1546.39	1294.40
		45,443	41,459	37,873	31,702

PoE - Monthly net yield (Benchmark)

Source: WRA



Section-15


TARIFF SUMMARY

In summation, the Project Company herewith most respectfully submits before NEPRA for its approval the matters set out in this Tariff Petition and further prays for NEPRA to kindly approve the following:

1. The Project Costs and related arrangements stated in this Petition be allowed to the Petitioner.
2. Energy production estimate of 42.65GWh per annum for calculation of the tariff and energy payments.
3. The Power Purchaser be directed to make payment against Bonus Energy (energy above the Monthly Benchmark Energy) on monthly basis.
4. The Project be allowed to claim compensation for energy supplied prior to COD at the rate of tariff allowed by NEPRA for the first year minus Loan servicing components.
5. Funding of the Project on a 75:25 - Debt: Equity ratio.
6. 100% of the Loan will be arranged from local banks.
7. Sharing of any CER related revenues subsequently realized, as per the Government of Pakistan policy.
8. IRR of 17% (exclusive of 7.5% withholding tax) along with Return on Equity during Construction Period is assumed, reasons for which have been provided in detail in Section 9 above.
9. Indexations and adjustments for the individual tariff components, as detailed in Section 12 above.
10. Insertion of Benchmark Energy "Table and Monthly Complex Power Curve as Schedule 1 of the EPA, the same are provided under Section 14 above.
11. The Reference Generation Tariff provided under Section 13 above along with individual tariff components and Loan schedule provided under Section 13 above.
12. Adjustments at COD, as provided under Section 13.

The Applicant would be pleased to provide any other information/assistance that the learned Authority may require in the matter of tariff petition.

This Application and its Annexures are being submitted in triplicate.



Furthermore, given the advance stage of the Project, NEPRA is kindly requested to process the Tariff Petition at the earliest thereby enabling the Project Company to proceed further with the development process.

We hope that the information provided above meets your requirements, and we remain available to assist you if you have any further queries.

Respectfully submitted for and on behalf of the Applicant;



SALEEM UZ ZAMAN

Company Secretary

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