



WESTERN ENERGY (PRIVATE) LIMITED

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The Registrar
National Electric Power Regulatory Authority
NEPRA Tower,
Attaturk Avenue (East)
Sector G-5/I, Islamabad

Date: 20th January, 2023

Ref.: WEL/NEPRA/002/23

Subject: Submission of Cost Plus Tariff Petition of Western Energy (Private) Limited for 47.6 MW Wind Power Project

Kindly accept the Company's Tariff Petition, along with the fee as determined by the National Electric Power Regulatory Authority ("NEPRA" or the "Authority") for kind consideration and favourable approval by the Authority in accordance, inter alia, with 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.

The Tariff Petition is submitted together with:

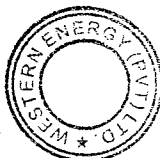
- The Bank Draft No. 01572367 dated 18th January 2023, amounting to PKR 747,777/- (Pakistan Rupees Seven Hundred Forty Seven Thousand Seven Hundred and Seventy Seven) as requisite for fee for Tariff Petition as communicated by NEPRA.
- Board Resolution of Western Energy (Private) Limited.
- Affidavit of Mr. Tabish Tapal.

We look forward to receive an early positive determination in order to achieve the completion of project within timelines in the national interest of Pakistan.

Yours sincerely,
For & On behalf of
Western Energy (Private) Limited



Tabish Tapal
Chief Executive Officer



FNA Jahan

27/01/23

25 (Rd)

MF

27/01/23

Copy to:- Chairman

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M (Tg)

Ms. 243, 222/2

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20/1/23



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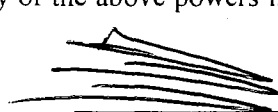
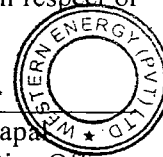
CERTIFIED TRUE COPY OF RESOLUTION OF THE BOARD OF DIRECTORS OF WESTERN ENERGY (PRIVATE) LIMITED

“RESOLVED THAT the Company be and is hereby authorized to file tariff petition (including any review petitions and any motion for leave for review) for submission to National Electric Power Regulatory Authority for determination of the reference generation tariff in respect of its 47.6MW wind power project to be located at Jhimpir, Thatta (the Project) and in relation thereto, enter into and execute all required documents, make all filings and pay all applicable fees, in each case, of any nature whatsoever, as required.”

“FURTHER RESOLVED THAT in respect of filing a tariff petition (including any review petitions and any motion for leave for review), **Mr. Tabish Tapal**, being the Chief Executive Officer of the Company, be and hereby authorized and empowered for and on behalf of the Company to:

- (i) Review, execute, submit, and deliver the tariff petition (including any review petitions and any motion for leave for review) and any related documentation required by National Electric Power Regulator Authority for the determination of the reference generation tariff, including any contact, documents, power of attorney, affidavits, statements, letters, forms, applications, deeds, guarantees, undertakings, approvals, memoranda, amendments, letters, communications, notices, certificates, requests, statements and any other instruments of any nature whatsoever;
- (ii) Represent the Company in all negotiations, representations, presentations, hearings, conferences and /or meetings of any nature whatsoever with any entity (including, but in no manner limited to National Electric Power Regulatory Authority, any private parties, companies, partnerships, individuals, governmental and/or semi-governmental authorities and agencies, ministries, boards, departments, regulatory authorities and/or any other entity if any nature whatsoever);
- (iii) Sign and execute the necessary documentation, pay the necessary fees, appear before the National Electric Power Regulatory Authority as needed, and do all acts necessary for completion and processing of the tariff petition (including any review petitions and any motion for leave for review) and procuring National Electric Power Regulatory Authority's tariff determination;
- (iv) Appoint or nominate any one or more officers of the Company or any other person or persons, singly or jointly, in their discretion to communicate with, make presentations to and attend any National Electric Power Regulatory Authority's hearings;
- (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 resolutions.”

“FURTHER RESOLVED THAT Mr. Tabish Tapal, being the Chief Executive Officer of the Company, be and is hereby singly authorized to delegate all or any of the above powers in respect of the forgoing to any other person as he may deem appropriate.”



Tabish Tapal
Chief Executive Officer

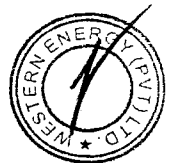
Before
National Electric Power Regulatory Authority

Tariff Petition

by
Western Energy (Private) Limited
for
47.6 MW Wind Power Project
at
Jhimpir, District Thatta, Sindh, Pakistan

20th January 2023

Western Energy (Private) Limited
F-25, Block 5, Rojhan Street
Kehkashan, Clifton, Karachi
Phone: +92 21 35876994-7

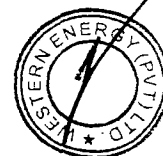


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Annexure II:	Approval of SEPA
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01 Petitioner's Information

1.1 Name and Address

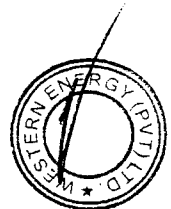
Western Energy (Private) Limited
F-25, Block 5, Rojhan Street
Kehkashan, Clifton, Karachi

Tel: +92 21 35876994-7

Email: tabish@tapalenergy.com.pk

1.2 Authorized Representative

Mr. Tabish Tapal
Chief Executive Officer
Western Energy (Private) Limited



02 Grounds for the Petition

2.1 Basis for Tariff Petition

Under the Regulation for Generation, Transmission and Distribution of Electric Power Act (XL of) 1997 (the NEPRA Act), the National Electric Power Regulatory Authority (NEPRA or Authority) is responsible, inter alia, for determining tariffs and other terms and conditions for the supply of electricity through generation, transmission and distribution. NEPRA is also responsible for determining the process and procedures for reviewing tariffs and recommending tariff adjustments. Further, pursuant to the enabling provisions of the NEPRA Act, the procedure for tariff determination has been prescribed in the NEPRA (Tariff Standards and Procedure) Rules, 1998 (the NEPRA Rules). Moreover, under the NEPRA Act, NEPRA is responsible for determining tariffs, rates and other terms and conditions for the supply of electric power services by the generation, transmission and distribution companies and recommending them for notification in the official gazette.

2.2 About the Petitioner – Brief

Western Energy (Private) Limited (“WEPL” or “Petitioner” or “Company”) was incorporated with Securities and Exchange Commission of Pakistan on 9th July 2013 to develop and operate a Wind Power Project. Alternative Energy Development Board (“AEDB”) issued a Letter of Intent (“LOI”) to WEPL on 6th March 2013 for establishing a 50 MW wind power generation project which was later extended till 24th June 2018. On 3rd September 2021, the validity of the said LOI was extended till 29th January 2022, which was later extended till 27th January 2023.

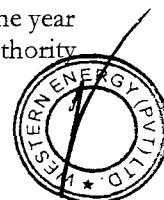
WEPL was granted a Generation License No. WPGL/37/2017 on 5th January 2017 (the “**Generation License**”) by NEPRA with 20 years of expected life from Commercial Operation Date (“COD”). Based on the latest market conditions, the WTGs for the Project has been revised from Haizhuang Windpower H111-2.0 MW to Goldwind GW140 – 3.4 MW. On 16th January 2023 WEPL has filed for a modification request in Generation License (“LPM”) to incorporate this change of WTG and corresponding changes in Capacity Factor and other aspects.

2.3 Background of Previous Tariff Petitions and Determinations

WEPL filed its initial tariff petition to NEPRA on 27th November 2017 under the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (“**NEPRA Act**”) and NEPRA (Tariff Standards & Procedure) Rules, 1998 for determination of reference generation tariff in respect of its 50 MW wind power project (the “**Project**”) to be set up at Jhimpir, District Thatta, Sindh. NEPRA admitted the tariff petition on 17th March 2018 and issued an admission notice highlighting the hearing schedule and issues framed for hearing. The hearing for this purpose was held on 3rd April 2018 and NEPRA determined the tariff of US Cents 4.3467/kWh (PKR 5.2161/kWh) for WEPL on 20th August 2018 (“**Determination**”).

The Determination required WEPL to achieve Financing Close (“FC”) within six months, i.e. not later than 19th February 2019, however, WEPL filed a Motion for Leave for Review (MLR) to NEPRA on 31st August 2018 under rule 16(6) of the NEPRA (Tariff Standards and Procedure) Rules and NEPRA (Review Procedure) Regulations. Under the review motion, WEPL requested for revision of project cost components, O&M cost as well as return on equity, construction period, capacity factor and financing terms. Moreover, under the review motion Authority was also requested to increase time period for achieving financial close due to the fact that financial close requires number of requirements including signing of EPA, IA, grid inter connection as well as signing of EPC, O&M and financing documents.

The review motion was admitted by the Authority on 13th September 2018 and a hearing was conducted on 17th October 2018. The Authority in its decision on MLR revised the tariff to US Cents 4.7357/kWh (PKR 5.6828/kWh) for WEPL on 12th February 2019 (“**Determination on MLR**”) and allowed one year time for achievement of financial close from the date of earlier Determination. Effectively, the Authority



still allowed only six (6) months (from 12th February 2019 to 20th August 2019) to Company for achieving financial close.

The Company filed clarification letter to Authority dated 25th March 2019 ("Review letter") to highlight that the one (1) year time period for achieving financial close from the date of the original tariff determination (which was based on some assumption which were not bankable) was not justified.

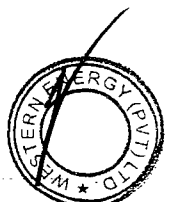
The aforementioned Review Letter was later converted into a review motion in which Company requested Authority to extend the financial closing date till 12th Feb 2020, i.e. the date which is 12 months after announcement of the Revised Tariff Determination. Hearing on the review motion filed was called on 18th December 2019. Keeping in view the fact that decision would have taken at least a few months, leaving once again insufficient time to achieve financial close by 12th February 2020 and hence continuing the same cycle, the Company during the hearing withdrew its request for review motion and decided to file a new tariff petition before NEPRA for the determination. This was also in-line with the intended way forward expressed by the Authority in the hearing.

Thereafter, the sponsors submitted New Petition on 12th May 2020 which was returned by NEPRA through letter dated 11th March 2022 with direction to file fresh tariff petition after resolving the issue on LPM. The primary reason for returning the petition is that decision on the LPM was not given due to unavailability of the NOC required from the Pakistan Air Force ("PAF"). This tariff petition is now being submitted with all requisites being in full compliance.

2.4 Process Leading to Tariff Petition

WEPL hereby submits petition before NEPRA for determination of tariff, keeping in view the following:

- (a) The revised feasibility study of the Project was submitted to AEDB on 2nd September 2022 (Annexure I)
- (b) Addendum to Initial Environmental Examination ("IEE") report was submitted to Sindh Environmental Protection Agency (SEPA) on 14th July 2022 and Decision on Addendum was issued on 22nd August 2022 (Annexure II)
- (c) Grid interconnection study was conducted by NTDC dated 01st December, 2016 and its consent of its validity under latest Project conditions has been issued by NTDC on 22nd July 2022 (Annexure III)
- (d) Generation License was issued by NEPRA on 18th April 2017 and LPM in Generation License was submitted on 16th January 2023 (Annexure IV)
- (e) Consent from CPPAG for purchase of power was issued on 19th August 2019 (Annexure V)
- (f) Land for the Project have been obtained on lease from Government of Sindh, Land Utilization department on 11th April 2018. (Annexure VI)
- (g) Binding EPC arrangement for design, supply, construction, erection and commissioning of the Project has been secured through signed contracts and are being submitted with this tariff petition. (Annexure VII)
- (h) Term sheet for Project debt has been arranged from Meezan Bank Limited ("MBL") and Bank AL Habib Limited ("BAHL") (Annexure VIII), and sponsors have committed the required equity for the Project.



03 Submissions for Authority's Consideration

As explained above, the Company was granted a tariff by the Authority on 12th February 2019 and was unable to achieve financial close within the required time frame. This petition primarily focuses on revisions in Project parameters, i.e. (i) change in WTG technology to adapt to latest market dynamics and to work with a leading turbine supplier who has a strong presence in the country, (ii) achieve a competitive capacity factor, (iii) change in Project financing parameters and (iv) obtain pricing that is in line with market conditions. The Authority is therefore requested to kindly consider the information as submitted by the Company in its previous tariff petition dated 27th November 2017, and the Authority's Determination thereon dated 20th August 2018 as well as MLR dated 31st August 2018 and Determination on MLR dated 12th February 2019.

The issues discussed under this Section are requested to be considered by the Authority, keeping in view amongst others, the following facts:

- a) COVID-19 pandemic and the Ukraine war has caused the overall global investment risk profile to deteriorate significantly.
- b) Substantial increase in commodity, materials, transport and energy prices in the recent past
- c) Cost of funds, i.e. cost of debt and cost of equity, has increased manifold in the last one year.

In order to assist the Authority in analyzing the increase in costs as requested by the Petitioner as compared to costs allowed in the Determination, the following paragraphs discuss the current wind turbine equipment prices, substation equipment prices and other factors impacting construction, project development and operating costs.

3.1 Wind Turbines Generators (WTG's)

Since the Determination of the Authority on 12th February 2019, the COVID-19 pandemic resulted in multiple lockdowns around the globe which affected the entire supply chain of manufacturing including the wind industry. Especially due to lockdowns in China, the supply demand balance has deteriorated significantly. As the global economy started to recover with the support of substantial monetary and fiscal expansions, commodity and energy prices have skyrocketed. This has had a significant impact on the prices of wind turbines, which are substantially dependent on the commodity prices such as steel, copper, rare earth materials, resin etc.

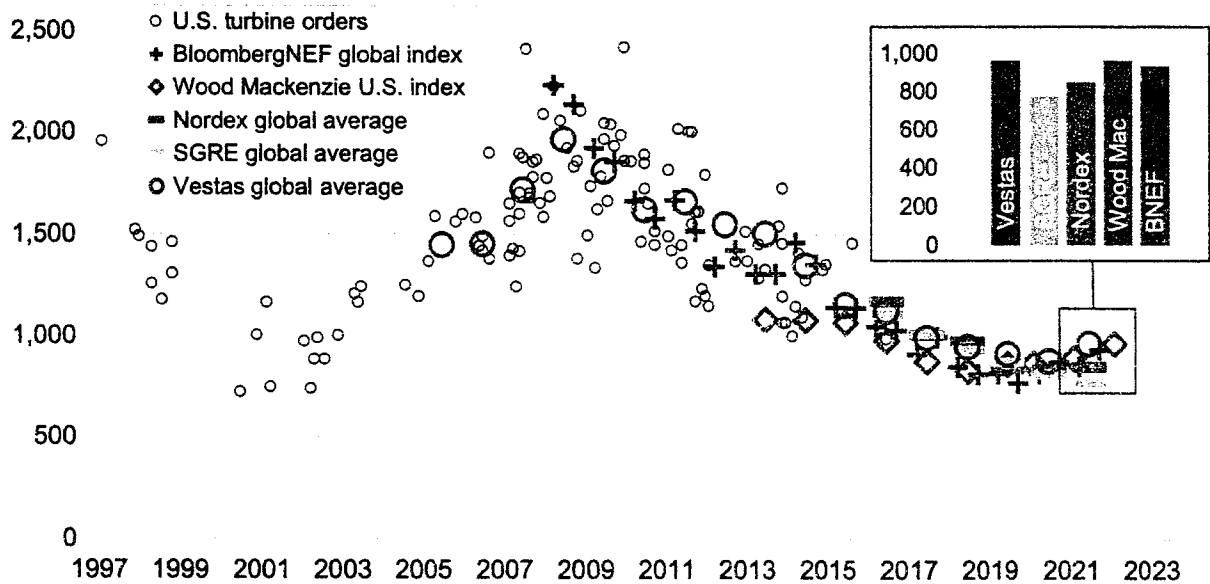
Wind turbine suppliers such as Vestas Wind Systems A/S, General Electric Co, Siemens Gamesa Renewable Energy SA (SGRE) and Goldwind are reeling from high raw material and logistics costs, changes in key clean-power subsidies, years of pressure on turbine prices and an expensive race to build ever-bigger machines. The pandemic rattled the wind industry, leading to major supply-chain disruptions and a surge in costs for materials and shipping. The cost increases span commodities, materials, energy, freight, labor, and geopolitical risk among other things. Turbine manufacturers are facing significant cost pressures and other challenges at a time when the fundamentals for renewable energy including wind have never been stronger. Rising material costs of steel, aluminum, copper, fiber glass, resins, and more have played a prominent role. The higher raw material prices are resulting in pricier bills for nearly all critical components, including towers, blades, power electronics, and foundations.

The decreasing trend of wind turbine prices prior to the pandemic was reversed and supply chain pressures, rising materials, labor, transport and energy prices, saw turbine prices increase significantly in 2021-22. *Wind turbine prices are expected to increase by up to 10% over the next 12 to 18 months due to increases in commodity prices, logistics costs, and coronavirus-related challenges, according to new analysis from Wood Mackenzie, a Verisk business (Nasdaq: VRSK). a rise in steel, copper,*



aluminum, and fiber prices, coupled with a four-fold increase in logistics costs, have increased turbine prices over the last six months.

Turbine Price (\$/kW)



Sources: Berkeley Lab, annual financial reports, forecast providers

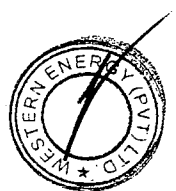
The above graph indicates that WTG pricing is showing an increasing trend. Recent supply-chain pressures and rising commodity, labour and energy prices led to increased turbine prices in 2021 and 2022. Regional differences in average project costs are also apparent and may occur due to variations in labor costs, development costs, transportation costs, siting and permitting requirements and timeframes, and other balance-of-plant and construction expenditures as well as variations in average project size and the turbines deployed in different regions.

Wind turbine manufacturers are raising prices after years of decline and are facing problems such as Siemens Gamesa scrapped its full-year guidance and said it was tracking toward a profit margin of minus 4% which is unsustainable and have therefore drastically increased pricing. Similarly, Wind segment troubles caused GE Renewable Energy to push back its goal of returning to break-even this year, after the division posted some \$2.3 billion in operating losses since 2019. GE now expects the division to be "approaching break-even" in 2023, with the onshore wind business, the largest by revenue, reaching low single-digit profit margins. Accordingly, last year, Vestas raised prices by over 20% on average for its turbines. GE has also been boosting prices, raising them by double-digit percentages since late last year.

As reported by BloombergNEF, WTG prices will stay elevated in 2022 and 2023

"We expect turbine prices will remain high through 2022, after enduring the second largest price increase of the decade in 2021. As the world grapples with the continuing supply chain chaos and the new Covid-19 variants, the market sees little indication that port congestion, container shortages, and lack of labor will ease in the near term. Several turbine makers expect the supply chain challenge to last a few more quarters. Rising commodity and transportation costs are eroding years of cost reductions gained through technological advancement. High shipping costs will keep pressuring turbine makers to raise, or at least not to cut prices."

Owing to increasing costs, significant market disruption events have occurred in the recent past where many WTG OEMs have decided to shut down/sell their manufacturing facilities, some such event are listed below;



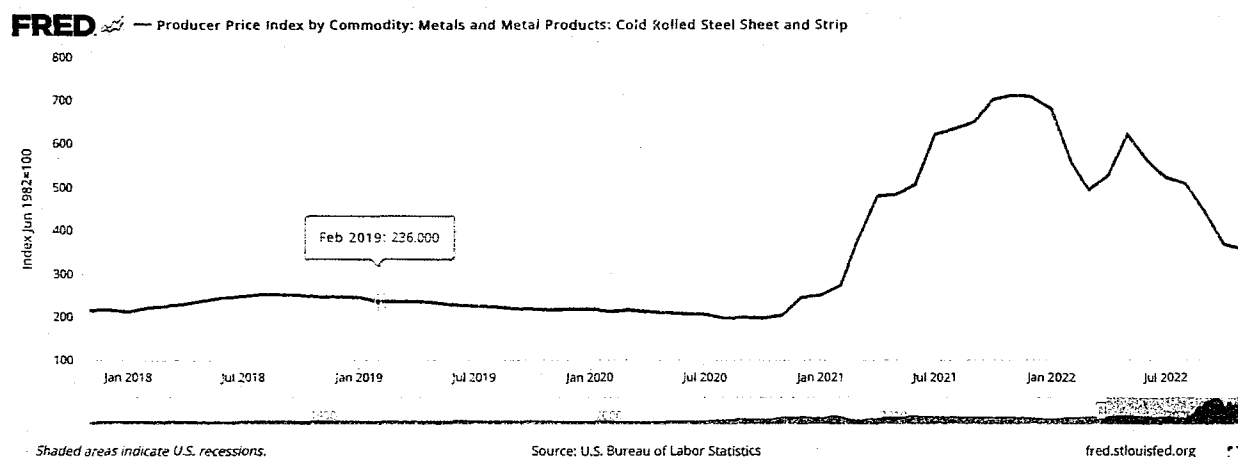
- SGRE is to temporarily shut two American facilities as the number three-ranked wind turbine manufacturer battles internal, US-specific, and industry-wide headwinds. The company is the latest top-three original equipment manufacturer (OEM) to ramp down US operations or consolidate its supply chain.
- In June 2021, top-ranked Vestas sold a tower manufacturing facility in Pueblo, Colorado, to South Korean firm CS Wind for \$150 million. In addition to this, Vestas closed its Brighton, Colorado, blade factory, LM Wind Power (owned by the US' top-ranked turbine supplier GE Renewable Energy) closed a blade factory in Arkansas, and TPI Composites shut its blade factory in Newton, Iowa.
- Mothballing of SGRE's blade manufacturing plant in Fort Madison, Iowa, and nacelle assembly plant in Hutchinson, Kansas, will take place in 2022 and July 2022, respectively.
- SGRE continued to mull its US onshore options, a sector where the company sees prospects undercut by supply chain problems and Congress' failure to advance a climate bill with vital extensions for subsidies.

All OEMs are facing similar issues which has resulted in overall increase in costs and logistics constraints. After significant due diligence, research and studies the Project Company has chosen the Goldwind GW140 – 3.4 MW turbine with a rotor diameter of 140m. This turbine was carefully selected so that there is minimal increase in the turbine prices.

3.2 Steel Prices

Top of the material costs list is the increase in steel prices. Steel accounts significant portion of the total mass of an onshore and offshore wind system, respectively, according to IHS Markit.

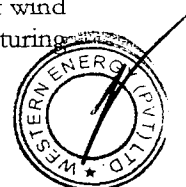
Steel prices have jumped because of a resurgence of demand following pandemic; shipping disruptions; reduced feedstock availability due to shipping delays and production outages; increased energy prices and energy/power outages, particularly in mainland China; and, trade tariffs and bans, such as the 25% tariff on steel imported to the US or a ban on Chinese imports of Australian coal. The below charts shows the increased price of Cold Rolled Steel since the last Determination of WEPL:



Cold Rolled Steel is used for towers, and as can be seen the price has increased from approx. USD 236 per ton in February 2019 to approx. USD 356 per ton as of January 2023. An increase of 51%.

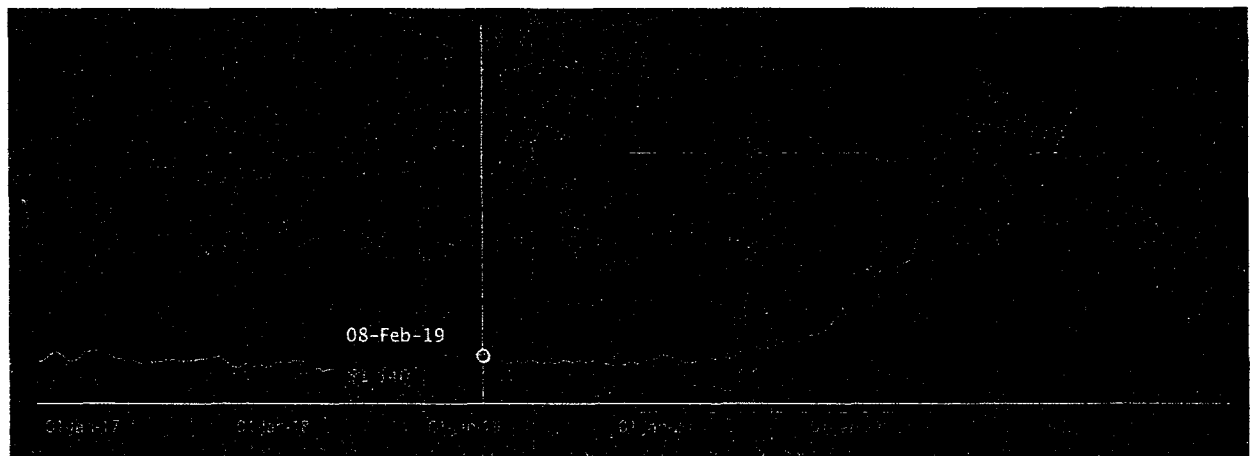
3.3 Transportation

The supply chain instability caused by the pandemic and followed by global recession has led to increasing transportation and logistics costs. These increased transportation costs are expected to continue to affect the wind power industry throughout 2022 and 2023. Due to the lack of availability of cargo ships and more importantly open bulk cargo, there are bottlenecks and huge price increases in the transportation of wind turbine equipment. OEMs are struggling not just to get smaller components to their manufacturing



facilities, mostly via containerized cargo but also in getting their finished components to project sites. Port congestion continues to significantly slow the circulatory movement of ships, containers, and other assets. Container shipping and open bulk cargo supply chain remains in the "deepest crisis". "As 2022 in ending, the situation is not improving. Spot container freight rates and open bulk cargo rates are still three to five times those of a year ago, depending on the trade lane. Global container freight rates index has increased from US\$ 1,540 to US\$ 2,178 from February 2019 to January 2023. This shows a 41% increase in freight rates since earlier Determination of the Authority. The above can be clearly seen from the below graph:

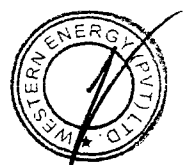
Global container freight rate index (USD)

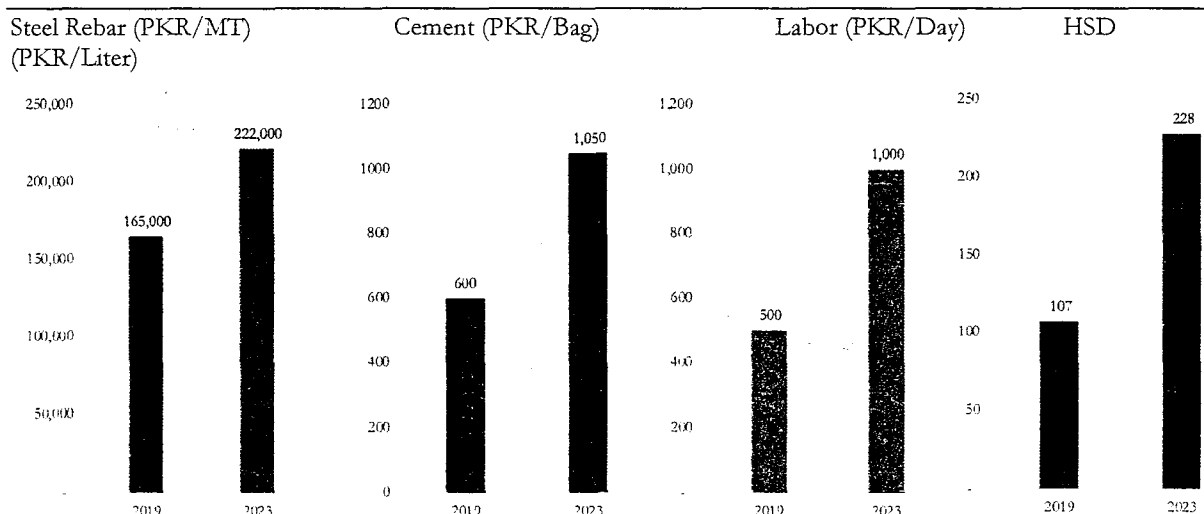


Source: freightos

3.4 Foundation Works/Civil Works

Foundation and civil work costs of wind power projects have increased due to increase in prices for steel cement and labor and HSD in local market. As depicted in the graph below, steel price increased from PKR 165,000 per MT at the time of earlier Determination to PKR 222,000 per MT. This shows an increase of 35% in steel prices which comprises a major part of the civil works. Similarly, cement and labor prices increased since the date of earlier Determination from PKR 600 per bag to PKR 1,050 per bag and PKR 500 per day to 1,000 per day respectively. Hence, there is 75% increase in prices of cement and 100% increase in the prices of labor, which are also major component of civil work costs of the Project. In addition to this High-Speed Diesel (HSD) prices have increased from PKR 114 per liter at the time of earlier Determination to PKR 228 per liter showing a 113% increase in price. Graphs below shows a comparison of these prices from the date of earlier Determination to today's prices.





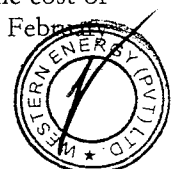
While comparing the civil costs for the earlier determined projects, it can be noted that due to the fewer number of turbines proposed for WEPL (14 x 3.4MW) a portion of the WTG related civil cost have been offset. While a larger amount of material (concrete and rebar) is required for one 3.4 MW turbine compared to 2.0MW or 2.5MW turbines, the reduced number of 3.4MW turbines has reduced the overall civil materials for the WTGs.

3.5 Electrical Balance of System

In addition to the increased cross sections and material usage for Cables, the increase in commodity prices (especially copper prices) is another major driver for increase in the cost of cables. As shown in the graph below copper prices increased from USD 2.8974 US\$/lbs in February 2019 to 3.9996 US\$/lbs in January 2023. This shows a 38% increase in copper prices since earlier Determination by authority.



Furthermore, the Project also requires aluminum cabling. There has also been a sharp increase in global aluminum prices since the previous Determination of WEPL which has significant impact on the cost of MV cables. As shown in the graph below aluminum prices increased from 1,835 US\$/Ton in February 2019 to 2,800 US\$/Ton in January 2023.



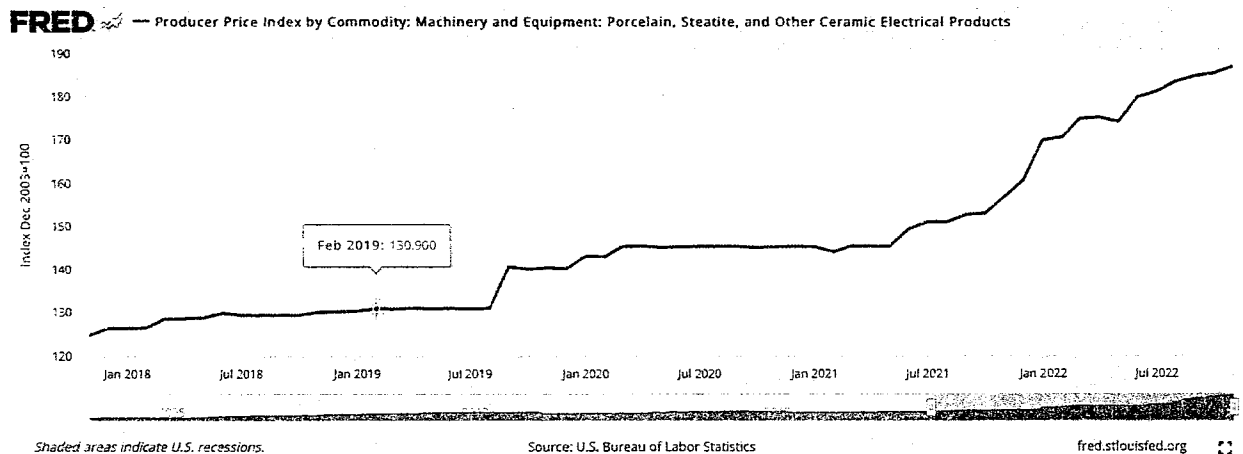
2019 to 2,296 US\$/Ton in January 2023. This shows a 25% increase in aluminum prices since earlier Determination by authority.

Increase in aluminum prices



Source: tradingeconomies.com

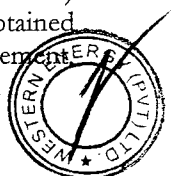
In addition to the above cost, the cost of porcelain and ceramic material which is used in the manufacturing of substation equipment has risen substantially mainly due to high energy costs and the energy intensive procedures for manufacturing. As can be seen from the graph below, the costs have gone up by approximately 43% since February 2019.



As the substation requirements are the same as previous determinations, the cost impact on this is significant. In addition, the Grid Code's N-1 criteria and NTDCs stringent technical specifications significantly increases the cost of the substation and therefore cannot be compared to a global norm.

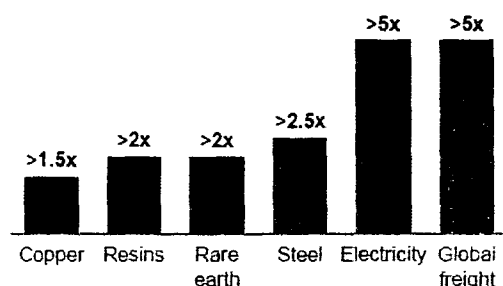
Total Impact on EPC Cost

IHS Markit (A part of S&P Global) presents a PEG Engineering and Construction Cost Index (ECCI) which showcases an increasing trend of EPC costs. This has been based upon independent data obtained and compiled by IHS Markit from procurement executives representing leading Engineering, Procurement



and Construction firms. The ECCI tracks industry specific trends and variations, identifying market turning points for key projects, and is intended to act as a leading indicator for wage and material inflation specific to this construction and engineering industry. The below graph also depicts the increase in commodity prices, which have impacted the EPC prices of wind power projects.

Commodity prices (Jan 2020 vs. Mar 2022)



Due to the reasons mentioned above the EPC cost of the Project has increased from previously approved US\$ 57.25 Million) to US\$ 62.8 Million and the same has been requested for the approval of the Authority.

EPC Components	Increase in Cost - USD Million
WTGs	1.15
Electrical	1.7
Transport	1.8
Civil	0.9
Total	5.55

As mentioned in above paragraphs, there is a significant increase in cost of turbines, steel rebar, transportation, electrical balance of system, foundation/civil works including cost of cement, labour, HSD etc. These factors resulted in higher EPC cost of wind projects. It is pertinent to mention here that despite the significant increase in cost of above items, the Company managed to achieve a competitive EPC price of US\$ 62.8 Million for the Project.

Despite the fact that most costs have gone up by more than 50% (some in excess of 100%), the total current EPC cost has only increased by 10% as compared to earlier determined EPC cost. This cost optimization of overall EPC price is achieved by selection of larger and efficient WTGs to offset the unprecedented cost increase in individual EPC components in the last 3-4 years.

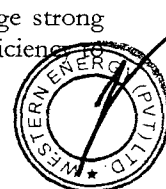
3.6 Capacity Factor

The wind studies have been carried out by using wind data measured on ground from a met mast that was commissioned on 14th January 2017. For the purpose of analysis, ten (10) minute interval data from 14th Jan 2017 to 30th March 2018 having duration of 14 months has been used.

Out of the available data, a measurement period of 12 months from 1st April 2017 to 31st March 2018 was selected for the annual average wind speed and wind direction having highest data coverage period (98.6 %) with good quality data, which is considered as a bankable time series. Analyzed average wind speed for the selected period is calculated as 7.81 m/s at 92.5 m height.

For the assessment of long-term wind speed, reference data sets of ERA5, and MERRA2 have been considered and resulted in the coefficient of determination of (R^2) = 80% to 91%. Resultantly, the long-term wind speed of 7.78 m/s is calculated at 92.5 m height above ground level (a.g.l.) at the mast location.

Fourteen (14) Goldwind wind turbines Goldwind GW140 – 3.4 MW at 80 m hub height have been used for the Project. The micro-siting of these wind turbines were performed considering the topographic and wind resource maps of the Project site. Goldwind is a key player in promoting energy transformation to attain access to affordable, reliable and sustainable energy for all, and to drive a renewable future. Goldwind specializes in wind power, internet of energy and environmental protection. Goldwind leverage strong scientific research innovation and best business practices to take renewable energy utilization efficiency



new heights. The WTG model selected is the latest product range and technology available worldwide with all reputable OEMs. At this point in time, this is going to be the largest WTG ever installed in Pakistan in terms of rotor diameter (blade size) and rated output.

Goldwind has a strong presence globally as well as in Pakistan with following stats:

- 86,134 MW (45,186 WTGs) installed globally.
- 477 MW (278 WTGs) installed in Pakistan.

The WindPRO (ver. 3.6) / WAsP (ver. 11) software is used to estimate the climatic parameters at each turbine location within the wind farm area based on the measured mast climatic data at a height of 92.5 m. The potential influence by all surrounding wind farms have been taken into account for the wake calculation. Losses are occurring along the whole energetic transformation chain from the rotor (kinetic energy) to the substation's delivery point (electricity) and have been considered on basis of turbine specifications and prudent assumptions.

Following losses have been considered to arrive at net energy number from the total gross:

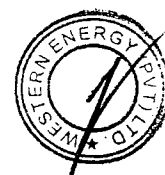
- Wake Effects
- Availability
- Turbine Performance
- Electrical
- Environmental

An uncertainty assessment was also carried out following net energy calculation. Uncertainty sources are associated to measuring equipment, data acquisition, data processing, energy model development, turbine parameters, losses and energy estimation. Following uncertainty parameters have been considered:

- Wind Speed Related
 - Measurement
 - Wind Speed (Cup Anemometer)
 - Wind Direction
 - Mounting
 - Data Processing
 - Data Integrity
 - Data Analysis
 - Long Term Correction
- Prediction Horizon
- Energy Related
 - Modelling
 - Power Curve
 - Loss Estimation
 - Overall Net Energy

The expected energy output of the Project is determined as 158,450 MWh per annum, which translates into a 38% annual capacity factor, and is considered consistent with the international and local performance trends at sites of similar wind climate. Moreover, the hub height of WEPL is 80m whereas the WTGs mostly installed in Pakistan during last many years have been in mid 90s. This is because of height limitations imposed on the Project due to its geographical location. Thirdly, the latest wind turbines are available in larger sizes and those have comparatively lesser power generation ability than smaller (and older) platforms, though these larger wind turbines bring optimization of costs. In this regard and in view of the aspects mentioned above, WEPL has taken a very optimistic view on the capacity factor. A detailed Wind Resource Assessment and Energy Yield Estimate Report was part of the Feasibility Study of the Project submitted to AEDB.

3.7 Project Development Cost



The Authority in its Determination had allowed Project Development Cost of US\$ 2.5 million, considering the impact of prolonged development period. However, the Project is further delayed due to reasons not attributable to WEPL. More importantly, WEPL changed the technology of the turbines to bring in technologically advanced, efficient and larger Goldwind GW140 – 3.4 MW WTGs. Due to this change several technical, financial studies and project agreements are required to be revised including but not limited to feasibility study, wind resource assessment, energy yield assessment, environmental study, geotechnical study, topography, lender due diligence, financial modeling, project and financing agreements which will result in additional costs for WEPL. Furthermore, as a result of extended project development period, additional administrative expenses (such as payrolls, travel expenses, office expenses etc.) are and will be incurred by WEPL in addition to extra costs for generation license modification, annual license fees for extended periods of development and tariff petition fees. Consequentially, these will result in an increased cost in addition to already approved Project Development Cost of US\$ 2.5 million in previous Determination. Despite the aforementioned increase in Project Development Costs, WEPL requests to maintain this cost at US\$ 2.5 Million as was previously allowed by the Authority.

3.8 Financing

The Authority in its Determination has already approved financing at 80:20 Debt to Equity ratio. Moreover, the Authority has directed to avail SBP financing for the Project and any remaining part of financing to be obtained from local or foreign finance and approved a rate of KIBOR + 2.25% or LIBOR + 4.25% for this purpose.

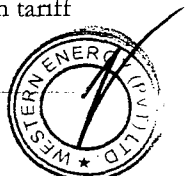
With regards to rate of foreign debt, the Authority's attention is drawn to the fact that after recent downgrade of Pakistan's sovereign credit rating by one notch further to Caa1 from B3, foreign lenders have increased the spread from 4.25% to 6% - 6.5% over base rate. In view of the Sponsors' credit history repeat customer relationship, the Project was able to secure a term sheet on the basis of 6% over base rate with a quarterly repayment period of 13.5 years.

Furthermore, USD LIBOR, used as the benchmark reference base rate for pricing of the USD facilities, will cease (globally) to be a benchmark and will no longer be available after June 30, 2023. Accordingly, all existing and new USD LIBOR linked transactions will need to be converted to a new benchmark reference rate, which will replace USD LIBOR. In this context, the USD financiers of WEPL will use Term Secured Overnight Financing Rate (the "**Term SOFR**") as a base reference rate for replacement of USD LIBOR, which has emerged in the market as the most widely accepted replacement reference rate for USD LIBOR. Since USD LIBOR incorporated a credit risk premium (which is not the case for Term SOFR), Term SOFR is typically lower than USD LIBOR. To ensure the new benchmark rate is comparable to USD LIBOR, a credit adjustment spread ("**CAS**") will be added to the Term SOFR. The CAS was fixed by the International Swaps and Derivatives Association and endorsed by regulators and is [0.26161% / 0.42826%] for conversions from [three-month / six-month] USD LIBOR.

The financing mix for WEPL is proposed to be 50% foreign and 50% local debt. With regards to local debt financing, the WEPL have been able to secure a term sheet based on SBP RE facility i.e. 6% fixed rate with 10 year repayment on equal principle basis. However, the lenders in the term sheet have indicated that availability of the SBP RE facility will be on best effort basis, primarily subject to availability of this facility from SBP. In case, the SBP RE facility is not available, the local debt will be arranged through a conventional debt facility at KIBOR plus 2.50%.

WEPL hereby request the Authority for same debt to equity ratio of 80:20 with a 50% SBP debt financing at the rate of 6% with a tenor of 10 years and 50% foreign debt financing at the rate of SOFR + CAS + 4.50% with at tenor of 13.5 years for the Project. WEPL humbly request the Authority to allow the above terms of financing to the Project. Indicative terms sheet from MBL and BAHF is enclosed at Annexure VIII for the consideration of the Authority.

This is to bring into Authority's notice that in recent past there is a significant increase in the base rate i.e. 3 M LIBOR which has increased from 0.6% to 4.01%. This increase in the base rate has an impact on tariff



of US\$ Cents 0.4 per kWh, while total impact on tariff with a spread of 6% form previous allowed spread of 4.25% is US\$ cents 0.6 per kWh.

3.9 Other Assumptions

As mentioned in Section 3 above, it requested that the Authority may consider this Petition as a continuation of the earlier Determination, and allow the assumptions already allowed in its earlier Determination (except the economic assumptions and indices i.e. LIBOR, Exchange rate, Pak CPI and US CPI). The tariff assumptions allowed by the Authority are reproduced in below table for ready reference, and the Authority is requested to allow the same for the sake of equality and justice.

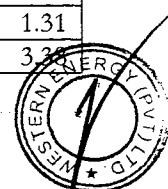
Sr.	Description	Already Allowed in the Determination	Assumptions for this petition
(i)	Project Development Cost	USD 2.5 Million	USD 2.5 Million
(ii)	Insurance During Construction	0.5% of the EPC Cost	0.5% of the EPC Cost
(iii)	Financing Costs	2.5% of the Debt Amount excluding impact of IDC & Financing Cost	2.5% of the Debt Amount excluding impact of IDC & Financing Cost
(iv)	O&M Cost	US\$ 23,000/MW	USD 26,000/MW
(v)	Insurance During Operation	0.4% of the EPC Cost	0.4% of the EPC Cost
(vi)	Tariff Period	25 years	25 years
(vii)	Debt Equity Ratio	80:20	80:20
(viii)	SBP Financing Rate	6%	6%
(ix)	KIBOR Rate (3 Month)	6.36%	15.79%
(x)	Spread Margin (Local)	2.25%	2.25%
(xi)	Base Rate for Foreign Debt	0.6% (3 Month LIBOR)	4.01% (3 Month SOFR plus CAS of 0.26161%) (Current 3 M LIBOR is at 4.01%)
(xii)	Spread Margin (Foreign)	4.25%	4.50%
(xiii)	USD/PKR exchange rate	120	PKR 225
(xiv)	Discount rate of levelization	10%	10%
(xv)	Return on Equity	14%	14%
(xvi)	Construction Period	15 Months	15 Months
(xvii)	True up conditions	Same as per the earlier Determination except for change in exchange rate provided above	
(xviii)	Sharing Mechanism	As allowed in the earlier Determination	
(xviv)	Indexation	As allowed in the earlier Determination taking into account the change in the reference index applicable at the time of Authority's determination	

04 Project Cost, O&M Cost and Tariff

4.1 Revised Project Cost

Changes in EPC Cost mentioned in Section 03 above have consequential impact on other cost components resulting in revised Project cost as follows:

Project Cost	USD Million
EPC Cost	62.80
Project development cost	2.50
Insurance during construction	0.31
Financial charges	1.31
Interest during construction	3.38



Total Project Cost	70.30
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4.2 Revised EPC Cost

WEPL has submitted previous tariff petition on Haizhuang Windpower H111-2.0 MW WTGs as per a turnkey, fixed price, EPC contract with Shanghai Marine Diesel Research Institute ("SMDERI"), which was selected after a competitive bidding process. However, EPC contract could not be materialized due to the fact that Company could not achieve FC in time due to delay in issuance of LOS by AEDB.

As mentioned earlier, the Project was not able to proceed to achieve FC for the reasons not attributable to the Company. In view of the current economic environment worldwide and particularly in Pakistan where unprecedented devaluation of PKR and highest ever inflation was recorded, it was not possible for WEPL to undertake the entire bidding exercise again as the contractors are reluctant to offer a binding price.

The Company entered into the EPC Contract(s) for the Project, which comprised of two (2) separate contracts in accordance with practice in Pakistan, namely:

- a) The Engineering and Construction Contract (the "Onshore Contract"); and
- b) The Equipment Supply Contract (the "Offshore Contract")

Distribution of responsibilities between the contracts is briefly described below:

The Onshore Contract is signed with Hydrochina International Engineering Company Limited which includes design, engineering, construction, erection, testing, commissioning and all other works for completion of the Project inside Pakistan.

The Offshore Contract is signed with Hangzhou Huachen Electric Power Control Company Limited which includes but not limited to supplying imported equipment and materials for the Project outside Pakistan. All equipment supplied under the Offshore Contract will be warranted by the Offshore Contractor.

EPC contract provides a lump-sum price, as provided in the below table:

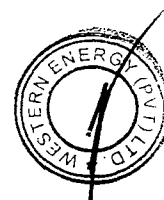
Description	Total (US \$ Million)
Equipment Supply Contract	50.24
Engineering and Construction Contract	12.56
Total Contract Price	62.80

4.3 Project Development Cost

As explained in Section 03, due to the changes in the project technology, certain technical, and financial studies as well as project agreements will be required to be revised including but not limited to feasibility study, wind resource assessment, financial model, project and financing agreements which will result in additional cost for WEPL. Despite of these increased costs, Authority is kindly requested to allow a Project development cost of US\$ 2.5 Million as was previously allowed to the Project.

The costs under the head of Project Development Cost include, but not limited to, the following:

- Feasibility study costs including cost for Topographical survey of land, Geological and geotechnical study, Project layout study and electrical study; and Transportation study etc.
- Costs related to the performance guarantee to be furnished to EDGOS / AEDB;
- Land Lease payments;
- Various regulatory fees to be paid to NEPRA;
- Costs incurred during Project Company formation;



- Project Company staff salaries, allowances and other benefits;
- Project Company head office – development and running expenses during construction period;
- Travelling costs of Project Company staff;
- Cost of security arrangement for the Project;
- Costs relating to various permits for the Project; and
- Project advisors, including cost of Local and Foreign Financial Advisors, Insurance Advisor, Audit and Tax Advisors, Security Advisors, etc.

4.4 Financing Terms

The following terms for financing the debt portion of the Project Cost have been assumed for the calculation of Reference Tariff Table:

Description	Terms
Total Value of Debt @ 80% of total Project Cost	56.24
SBP RE Refinancing Scheme (50% of the total debt requirement)	6%
Repayment of SBP RE Refinancing Scheme	10 years on Equal Principal basis
Local Debt (in case SBP financing is not available)	
Base Rate (KIBOR) for Local Debt	15.78%
Spread over KIBOR	2.50%
Repayment Period for Local Debt	13.5 years on annuity basis
Foreign Debt (50% of the total debt requirement)	
Base Rate (3 M SOFR plus CAS) for Foreign Debt	4.01%
Spread over LIBOR	6%
Repayment Period for Foreign Debt	13.5 years on annuity basis
Repayment Schedule	Quarterly

Authority is hereby requested to allow conventional local financing in case SBP financing is not available for the Project.

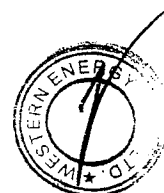
4.5 Duties and Taxes

Duties and Taxes of non-refundable nature shall be adjusted at Commercial Operations Date, based on the actual cost incurred for which the Project Company shall submit documentary evidence to the satisfaction of the Authority.

4.6 Revised O&M Costs

Operations and maintenance of the Project mainly include regular repair and maintenance, spare parts, administration and other related costs of the Project during operational period. Due to global recession and raising inflation O&M cost of wind power projects costs have increased substantially, especially the replacement cost of equipment. This is evident from the increase in price of steel, cement, labor, transport as shown in section 3.4 as well as increase in price of copper and aluminum as shown in section 3.5 above. As a result of these factors, O&M cost of the Project has increased from US\$ 23,000/MW per annum to US\$ 26,000/MW per annum.

The Authority would be aware that in almost all the project finance deals for wind projects in Pakistan, the OEM of the WTGs is appointed as the O&M Contractor for at least debt term for the Project. Therefore, the Company intends to engage Gold Wind as the long term O&M Contractor for Project for the period of 13 years from COD. Furthermore, during the Warranty Period (i.e. two years of operations after COD), the EPC Contractor will act as the Warranty Period O&M Contractor under Warranty Period O&M Contract (WP O&M) and Gold Wind will act as a sub-contractor of the WP O&M Contractor.



The requested amount of USD 26,000/MW per annum (i.e. total USD 1.287 million per annum) is based on the following estimated costs;

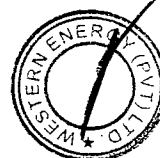
O&M Cost Components	US\$ per annum
O&M Contractor annual fee	950,000
Company Annual Operating Costs	
Human Resource Costs	90,000
Site Security	75,000
Site Expenses and Electricity	80,000
Office (rent, utilities, POL, stationery, communication etc.)	40,000
Annual Regulatory Fee (NEPRA/SECP/EPA/Others)	10,000
Annual Statutory Audit	10,000
Lenders Annual Fee (Agency Fee, Monitoring Fee etc.)	25,000
Miscellaneous Operating Costs	7,000
Total Annual O&M Cost	1,287,000



Reference Generation Tariff

Given below is the reference generation tariff table based on updated assumptions

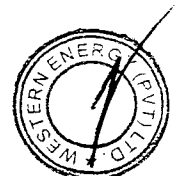
Year	O&M Local	O&M Foreign	Insurance	RoE	RoEDC	Foreign Debt	Local Debt	Total Tariff	
	Rs kWh							Rs kWh	Usc kWh
1	0.8787	0.8787	0.3567	2.7952	0.3018	5.4253	6.2993	16.9357	7.5270
2	0.8787	0.8787	0.3567	2.7952	0.3018	5.4253	6.0597	16.6961	7.4205
3	0.8787	0.8787	0.3567	2.7952	0.3018	5.4253	5.8201	16.4565	7.3140
4	0.8787	0.8787	0.3567	2.7952	0.3018	5.4253	5.5805	16.2169	7.2075
5	0.8787	0.8787	0.3567	2.7952	0.3018	5.4253	5.3409	15.9773	7.1010
6	0.8787	0.8787	0.3567	2.7952	0.3018	5.4253	5.1013	15.7377	6.9945
7	0.8787	0.8787	0.3567	2.7952	0.3018	5.4253	4.8617	15.4981	6.8881
8	0.8787	0.8787	0.3567	2.7952	0.3018	5.4253	4.6221	15.2586	6.7816
9	0.8787	0.8787	0.3567	2.7952	0.3018	5.4253	4.3825	15.0190	6.6751
10	0.8787	0.8787	0.3567	2.7952	0.3018	5.4253	4.1429	14.7794	6.5686
11	0.8787	0.8787	0.3567	2.7952	0.3018	5.4253	-	10.6364	4.7273
12	0.8787	0.8787	0.3567	2.7952	0.3018	5.4253	-	10.6364	4.7273
13	0.8787	0.8787	0.3567	2.7952	0.3018	5.4253	-	10.6364	4.7273
14	0.8787	0.8787	0.3567	2.7952	0.3018	2.7127	-	7.9238	3.5217
15	0.8787	0.8787	0.3567	2.7952	0.3018	-	-	5.2111	2.3160
16	0.8787	0.8787	0.3567	2.7952	0.3018	-	-	5.2111	2.3160
17	0.8787	0.8787	0.3567	2.7952	0.3018	-	-	5.2111	2.3160
18	0.8787	0.8787	0.3567	2.7952	0.3018	-	-	5.2111	2.3160
19	0.8787	0.8787	0.3567	2.7952	0.3018	-	-	5.2111	2.3160
20	0.8787	0.8787	0.3567	2.7952	0.3018	-	-	5.2111	2.3160
21	0.8787	0.8787	0.3567	2.7952	0.3018	-	-	5.2111	2.3160
22	0.8787	0.8787	0.3567	2.7952	0.3018	-	-	5.2111	2.3160
23	0.8787	0.8787	0.3567	2.7952	0.3018	-	-	5.2111	2.3160
24	0.8787	0.8787	0.3567	2.7952	0.3018	-	-	5.2111	2.3160
25	0.8787	0.8787	0.3567	2.7952	0.3018	-	-	5.2111	2.3160
Levelized Tariff								13.1954	5.8646



4.7 Debt Repayment Schedule (SBP Financing)

Given below is the debt repayment schedule of 50% financing at SBP rate.

Quarter	Principal		Markup		Instalment	
	PKR	Rs kWh	PKR	Rs kWh	PKR	Rs kWh
1	158,181,592	0.9983	94,908,955	0.5990	253,090,547	1.5973
2	158,181,592	0.9983	92,536,231	0.5840	250,717,823	1.5823
3	158,181,592	0.9983	90,163,507	0.5690	248,345,099	1.5673
4	158,181,592	0.9983	87,790,783	0.5541	245,972,375	1.5524
5	158,181,592	0.9983	85,418,060	0.5391	243,599,651	1.5374
6	158,181,592	0.9983	83,045,336	0.5241	241,226,928	1.5224
7	158,181,592	0.9983	80,672,612	0.5091	238,854,204	1.5074
8	158,181,592	0.9983	78,299,888	0.4942	236,481,480	1.4925
9	158,181,592	0.9983	75,927,164	0.4792	234,108,756	1.4775
10	158,181,592	0.9983	73,554,440	0.4642	231,736,032	1.4625
11	158,181,592	0.9983	71,181,716	0.4492	229,363,308	1.4475
12	158,181,592	0.9983	68,808,992	0.4343	226,990,584	1.4326
13	158,181,592	0.9983	66,436,269	0.4193	224,617,860	1.4176
14	158,181,592	0.9983	64,063,545	0.4043	222,245,137	1.4026
15	158,181,592	0.9983	61,690,821	0.3893	219,872,413	1.3876
16	158,181,592	0.9983	59,318,097	0.3744	217,499,689	1.3727
17	158,181,592	0.9983	56,945,373	0.3594	215,126,965	1.3577
18	158,181,592	0.9983	54,572,649	0.3444	212,754,241	1.3427
19	158,181,592	0.9983	52,199,925	0.3294	210,381,517	1.3277
20	158,181,592	0.9983	49,827,201	0.3145	208,008,793	1.3128
21	158,181,592	0.9983	47,454,478	0.2995	205,636,069	1.2978
22	158,181,592	0.9983	45,081,754	0.2845	203,263,346	1.2828
23	158,181,592	0.9983	42,709,030	0.2695	200,890,622	1.2678
24	158,181,592	0.9983	40,336,306	0.2546	198,517,898	1.2529
25	158,181,592	0.9983	37,963,582	0.2396	196,145,174	1.2379
26	158,181,592	0.9983	35,590,858	0.2246	193,772,450	1.2229
27	158,181,592	0.9983	33,218,134	0.2096	191,399,726	1.2079
28	158,181,592	0.9983	30,845,410	0.1947	189,027,002	1.1930
29	158,181,592	0.9983	28,472,687	0.1797	186,654,278	1.1780
30	158,181,592	0.9983	26,099,963	0.1647	184,281,555	1.1630
31	158,181,592	0.9983	23,727,239	0.1497	181,908,831	1.1480
32	158,181,592	0.9983	21,354,515	0.1348	179,536,107	1.1331
33	158,181,592	0.9983	18,981,791	0.1198	177,163,383	1.1181
34	158,181,592	0.9983	16,609,067	0.1048	174,790,659	1.1031
35	158,181,592	0.9983	14,236,343	0.0898	172,417,935	1.0881
36	158,181,592	0.9983	11,863,619	0.0749	170,045,211	1.0732
37	158,181,592	0.9983	9,490,896	0.0599	167,672,487	1.0582
38	158,181,592	0.9983	7,118,172	0.0449	165,299,763	1.0432
39	158,181,592	0.9983	4,745,448	0.0299	162,927,040	1.0282
40	158,181,592	0.9983	2,372,724	0.0150	160,554,316	1.0133



4.8 Debt Repayment Schedule

Given below the debt repayment schedule on the basis of 50% foreign financing for the Project.

Quarter	Principal		Markup		Installment	
	USD	Rs. kWh	USD	Rs. kWh	USD	Rs. kWh
1	28,121,172	0.3570	703,732	0.9993	955,162	1.3563
2	27,869,742	0.3660	697,440	0.9904	955,162	1.3563
3	27,612,021	0.3751	690,991	0.9812	955,162	1.3563
4	27,347,850	0.3845	684,380	0.9718	955,162	1.3563
5	27,077,068	0.3941	677,604	0.9622	955,162	1.3563
6	26,799,510	0.4040	670,658	0.9523	955,162	1.3563
7	26,515,006	0.4141	663,538	0.9422	955,162	1.3563
8	26,223,382	0.4245	656,240	0.9319	955,162	1.3563
9	25,924,460	0.4351	648,760	0.9212	955,162	1.3563
10	25,618,058	0.4460	641,092	0.9103	955,162	1.3563
11	25,303,988	0.4571	633,232	0.8992	955,162	1.3563
12	24,982,058	0.4686	625,176	0.8877	955,162	1.3563
13	24,652,073	0.4803	616,918	0.8760	955,162	1.3563
14	24,313,829	0.4923	608,454	0.8640	955,162	1.3563
15	23,967,121	0.5046	599,777	0.8517	955,162	1.3563
16	23,611,736	0.5173	590,884	0.8391	955,162	1.3563
17	23,247,458	0.5302	581,768	0.8261	955,162	1.3563
18	22,874,064	0.5435	572,423	0.8128	955,162	1.3563
19	22,491,325	0.5571	562,845	0.7992	955,162	1.3563
20	22,099,009	0.5710	553,028	0.7853	955,162	1.3563
21	21,696,875	0.5853	542,964	0.7710	955,162	1.3563
22	21,284,677	0.6000	532,649	0.7564	955,162	1.3563
23	20,862,164	0.6150	522,076	0.7413	955,162	1.3563
24	20,429,078	0.6304	511,238	0.7260	955,162	1.3563
25	19,985,154	0.6461	500,128	0.7102	955,162	1.3563
26	19,530,121	0.6623	488,741	0.6940	955,162	1.3563
27	19,063,700	0.6789	477,069	0.6774	955,162	1.3563
28	18,585,608	0.6959	465,105	0.6604	955,162	1.3563
29	18,095,551	0.7133	452,841	0.6430	955,162	1.3563
30	17,593,230	0.7311	440,271	0.6252	955,162	1.3563
31	17,078,339	0.7494	427,385	0.6069	955,162	1.3563
32	16,550,562	0.7682	414,178	0.5881	955,162	1.3563
33	16,009,578	0.7874	400,640	0.5689	955,162	1.3563
34	15,455,056	0.8071	386,763	0.5492	955,162	1.3563
35	14,886,657	0.8273	372,539	0.5290	955,162	1.3563
36	14,304,034	0.8480	357,958	0.5083	955,162	1.3563
37	13,706,830	0.8692	343,013	0.4871	955,162	1.3563
38	13,094,682	0.8910	327,694	0.4653	955,162	1.3563
39	12,467,215	0.9133	311,992	0.4430	955,162	1.3563
40	11,824,045	0.9362	295,897	0.4202	955,162	1.3563
41	11,164,780	0.9596	279,399	0.3967	955,162	1.3563
42	10,489,016	0.9836	262,488	0.3727	955,162	1.3563
43	9,796,342	1.0082	245,153	0.3481	955,162	1.3563
44	9,086,334	1.0334	227,386	0.3229	955,162	1.3563
45	8,358,558	1.0593	209,173	0.2970	955,162	1.3563
46	7,612,569	1.0858	190,505	0.2705	955,162	1.3563
47	6,847,911	1.1130	171,369	0.2433	955,162	1.3563
48	6,064,119	1.1408	151,755	0.2155	955,162	1.3563
49	5,260,711	1.1694	131,649	0.1869	955,162	1.3563
50	4,437,199	1.1987	111,041	0.1577	955,162	1.3563
51	3,593,078	1.2286	89,917	0.1277	955,162	1.3563
52	2,727,833	1.2594	68,264	0.0969	955,162	1.3563
53	1,840,935	1.2909	46,069	0.0654	955,162	1.3563
54	931,842	1.3232	23,319	0.0331	955,162	1.3563



05 Prayer

In light of the foregoing, it is respectfully prayed that the earlier Determination may be reviewed based on the proposed technology and related factors as per the details given throughout this Petition.

In order to achieve financial closing, the Authority is also requested to allow a further period of 12 months for financial close of the Project.

Authority is requested to allow (a) change in WTG Technology (b) increase in EPC cost (c) change in project financing parameters and (d) change in capacity factor based on the change in WTG technology.

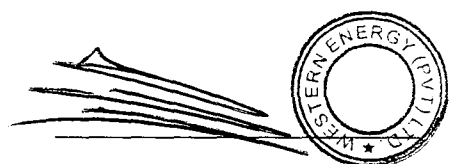
Authority is further requested to maintain original decision (as per the Determination) with regard to debt equity structure, return on equity, other costs and all indexations, escalations, adjustments and sharing mechanism. Any other relief that the Petitioner may be entitled to, be also allowed to the Project in the interest of justice.

Authority is also requested to approve a reference tariff table based on assumptions as requested in the petition.

Further any taxes, stamp duties, fees and levies (sales tax of non-refundable nature) etc. of federal, provincial, local or district governments, which are not factored in the tariff calculation are requested to be allowed as pass through.

Authority is kindly requested to process the Tariff Petition at the earliest thereby enabling WEPL to proceed further with the development process. The proposed levelized tariff of 13.19 Rupees per kwh is 2.1x cheaper than the rates being charged by current distribution companies and will significantly lower the basket price of energy in Pakistan. Further, by enabling this project, the country can save on imports of costly imported fuels which are currently crippling the economy and a major contributor to the current account and trade deficit and the depleted foreign exchange reserves. The Authority must move quickly to enable such projects which will serve to reverse the economic conditions of the country and promote a cleaner and greener Pakistan.

Respectfully submitted on the behalf of Petitioner.



Mr. Tabish Tapal
Chief Executive Officer
Western Energy (Private) Limited

20th January 2023