BEFORE
THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

MOTION FOR LEAVE FOR REVIEW

PURSUANT TO NEPRA (TARIFF STANDARDS AND PROCEDURE) RULES, 1998 [RULE 16(6)] READ WITH NEPRA (REVIEW PROCEDURE) REGULATIONS 2009 & PROVISIONS OF THE REGULATION FOR GENERATION, TRANSMISSION AND DISTRIBUTION OF ELECTRIC POWER ACT (XL OF) 1997 & THE RULES AND REGULATION MADE THEREUNDER AGAINST THE DETERMINATION OF THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY IN THE MATTER OF TARIFF PETITION FILED BY
IRAN-PAK WIND POWER (PRIVATE) LIMITED

DATED 20.03.2019
(CASE NO. NEPRA/TRF-467/IPWP-2019)
Filed By:
IRAN-PAK WIND POWER (PRIVATE) LIMITED

IN RESPECT OF
WIND POWER PROJECT OF 50 MW
AT DEH KOHISTAN 7/3 TAPO JUNGSHAHI, TALUKA & DISTRICT THATTA, SINDH, PAKISTAN

DATED : 25th AUGUST 2020

Iran Pak Wind Power (Pvt) Limited
Karachi

1. Petitioner's Information:

Name: Iran Pak Wind Power Pvt Ltd

Address: Suite# 514, 5th Floor, Progressive Plaza, Ch. Aslam Shaheed Road, Karachi, Pakistan

Company Registration No : 0071078

Email : planetgroup@ptcl.net, planetgroupmobile@gmail.com

Project Sponsors : Sunir Co , Iran

Representative of the Petitioner : Khurram Sayeed , Chief Executive Officer

Project Advisors :

Technical Advisor : GNEC, Iran

Legal Council : Sayeed .A. Sheikh & Co

Iran Pak Wind Power (Pvt) Limited
Karachi

MOTION FOR LEAVE FOR REVIEW

1. **Name of the Petitioner:**

Iran-Pak Wind Power (Private) Limited.

2. **Legal Basis:**

This motion for leave for review is filed by Iran-Pak Wind Power (Pvt.) Limited (the "**Company**" or the "**Petitioner**") before National Electric Power Regulatory Authority (the "**NEPRA**" or the "**Authority**") against the Tariff Determination (as defined below), under, *inter alia*, the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (as amended, the "**Act**"), read with Rule 16(6) of NEPRA (Tariff Standard and Procedures) Rules 1998, NEPRA (Review Procedure) regulations 2009 and all other applicable provisions of NEPRA laws (the "**Review Petition**") against the Impugned Decision (defined below):

3. **Policy:**

This Project is being developed under the Policy for Development of Renewable Energy for Power Generation, 2006.

4. **Petitioner:**

Iran-Pak Wind Power (Pvt.) Limited is a private limited company duly organized and existing under the laws of Pakistan with its registered office at Karachi to act as a special purpose vehicle and develop 50 MW Wind Power Generation Facility at Jhimpir, District & Tehsil Thatta, Sindh (the "**Project**") .

5. **Incorporation by Reference:**

The Company submitted a Tariff Petition to the Authority for the determination of generation tariff in respect of its Project on 20.03.2020 (the "**Tariff Application**"). The Authority through its determination bearing reference no. NEPRA/R/SA(Tariff)/TRF-467/IPWP-2019/21546 dated 18th August 2020 determined and approved the reference generation tariff for the Company (the "**Tariff Determination**" or the "**Impugned Decision**"). The Company would like to incorporate by reference Tariff Application, Tariff Determination and related correspondence and requests the learned Authority that the same may kindly be read as an integral part of this Review Petition.

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6. MOTION FOR LEAVE FOR REVIEW:

6.1 In exercise of powers granted to the learned Authority under the NEPRA laws and for sufficient ground, peculiar facts and circumstances of the Project mentioned herein below, the Petitioner humbly requests the learned Authority to kindly review and reconsider the Impugned Decision on the grounds and reasons mentioned in this Review Petition.

6.2 The learned Authority is also requested that the Company may kindly be allowed subsequent to this filing and during the proceedings to take additional ground, submit additional evidence and make further submissions in relation to this Review Petition. The Company shall be pleased to provide any further information, clarification or explanation that may be required by the learned Authority during the evaluation process.

7. GROUNDS FOR REVIEW:

7.1 Adjustments on account of Engineering, Procurement and Construction (the "EPC") Costs:

7.1.1 It is humbly submitted that during the hearing; at the outset the company acknowledged the fact that the EPC contract was negotiated and signed by the company few years back and that the prices have shifted downward and would let NEPRA decide on the current prevailing prices.

7.1.2 The learned Authority has approved the EPC costs of USD 46.12 Million for the petitioners Project.

7.1.3 According to the determination; to evaluate EPC Cost claim of the petitioners Project; the learned authority has relied upon international publications; Quote

"To evaluate the EPC cost claim of IPWPPL, the Authority has considered the latest available EPC cost data in different parts of the world. The information given in the reports published by International Renewable Energy Agency ("IRENA"), Bloomberg and other sources has been relied upon for this purpose. Furthermore, the tariff determinations approved by the regulators of countries in different regions have also been studied". Un-Quote.

7.1.4 It is pertinent to mention here that besides the above two quoted publications; the Authority has not revealed "other sources" and neither the detailed working on how it arrived at EPC cost of USD 46.12 Million; except the fact that it used an average wind turbine price as basis for calculation of EPC price; Quote

"It was noted that the average wind turbine prices across most of the countries were below USD 0.70 million per MW in 2019. The most updated reports provide that average global cost of wind turbines to be delivered in 1st Half of 2020 have fallen to around USD 0.69 million per MW. These reports also forecast the gradual reduction in turbine prices in coming years." Un-Quote

7.1.5 In preparing this review petition; the petitioner evaluated the available reports quoted above and found that the reports were issued in 2019; giving certain forecasts for 2020 as well; while some other reports related to year 2018 were not relevant to subject determination.

7.1.6 It is extremely important to mention here that the learned Authority has relied upon the predicted prices of wind turbines in the 1st half of 2020 from reports published in 2019; however these reports could not predict the scenarios of post COVID-19 period. According to Bloomberg New Energy Finance [BNEF] [Report-1][i] ; the report; Quote

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"do not reflect what may happen to the LCOEs of different generation technologies as a result of the economic shock created by the coronavirus pandemic." Un-Quote

7.1.7 Moreover; according to the International Energy Association (IEA) [**Report-2**][ii]; Quote

"The economic downturn is also expected to increase existing financing and project development challenges for developing countries in Africa, Latin America and Eurasia" Un-Quote

7.1.8 In light of the above; it is quite evident that the factory production and supply chain have been severely affected due to the various social distancing and lockdown measures as a result of the Covid-19 pandemic. Not only that; but due to the overall economic meltdown; the pandemic has also increased challenges for financing and developing of new projects. The learned Authority is requested to consider higher costs associated with these challenges when pricing EPC.

7.1.9 The turbine price of USD 0.70 to USD 0.69 million per MW quoted by the learned Authority in impugned decision may be a reference to a specific country/region and/or technology and the authority itself mentioned in the determination that; Quote

"However, the Authority is of the view that the cases of any particular country cannot be made exact reference for Pakistan owing to differences in market conditions, local manufacturing bases, tariff regimes, performance targets and other technological and economic factors." Un-Quote

7.1.10 The learned authority has not provided any reference on the technology that they have quoted when pricing the turbines at US $0.70/MW and how it arrived at the EPC price of $46.12. While it is quite impossible to know which technology/country the learned Authority referred to above; but according to BNEF[iii], this price is a reference to a higher capacity turbine such as the 4.1 MW series; which is not the case in petitioner's project.

"Onshore wind has seen its most significant drop in cost since 2015. This is mainly due to a scale-up in turbine size, now averaging 4.1 megawatts, and priced at about $0.7 million per megawatt for recently financed projects." Un-Quote

7.1.11 Moreover; these reports do not price in the subsidies or tax credits when compiling data and the learned Authority themselves stated above that case of any particular country cannot be made a reference to Pakistan. Furthermore; while the learned Authority already excluded China and India when considering Pakistan; other countries too cannot be made basis for Pakistan as some have hidden subsidies and some like USA[iv] have declared subsidies such as the Production Tax Credit (PTC), Investment Tax Credit (ITC) besides other grants; hence they too are not a true reflection when making a case for Pakistan.

7.1.12 It is also pertinent to mention here that the authority approved tariff of 12 WPP's[1] of 50 MW each; same capacity as the subject project Nov 2018 and Feb 2019 at an average EPC price of USD 58 Million.

7.1.13 Furthermore; out of the 12 WPP's; 7 WPP's[2] tariff was determined using Gamesa G114 2.0 MW turbine; same as the subject project.

7.1.14 Therefore; the Authority has slashed the EPC cost of the subject project by 20% when compared to these 7 WPP's of same size and technology in a matter of 2 years; at an average of 10% / annum.

[1] 12 WPP's of 50 MW = 1. Master Green Energy 2. Western Energy 3. Lakeside 4. Artistic 5. Liberty (1) 6. Indus 7. ACT2 8. Liberty (2) 9. Nasda 10.DIN 11. Gul Ahmed Electric 12. Tricom.

[2] 7 WPP's of 50 MW's using Gamesa G114 2.0 MW = 1. Master Green Energy 2. Lakeside 3. Liberty (1) 4. Liberty (2) 5. Nasda 6. DIN 7.Tricom

7.1.15 According to the International Renewable Energy Agency [IRENA]; report titled Renewable Power Generation Costs in 2019 **[Report 3]**[v] costs for onshore wind have fallen between 3% yearly since 2010; approximately 27% over a period of 9 years[vi]. This is a global average without necessarily taking into account country specific risks. Therefore; a drop by 20% is not at all justified.

7.1.16 Moreover; the learned Authority may have overlooked the fact that the cost of commodities has also gone up in the last two years. According to the Pakistan Bureau of Statistics; the Pak CPI in June 2018 was 226.68[vii] which in June 2020 stood at 269.27[viii]; resulting in an increase of 18.8% over the two year period; with an average of 9.4% per year [Table 1].

Table 1 - PAK CPI [Base Year 2007-08 General]

Jun-18	Jun-20		Increase/Decrease
226.68	269.27	↑	18.8%

Source: Pakistan Bureau of Statistics

7.1.17 On the other hand ; according to the US Bureau of Labor Statistics[ix]; the US CPI in June 2018 was 251.989 which in June 2020 stood at 257.797; resulting in a increase of 2.3% over two years; at an average of 1.15% per year [Table 2].

Table 2 - US CPI (U)

Jun-18	Jun-20		Increase/Decrease
251.989	257.797	↑	2.3%

Source: US Bureau of Labor Statistics

7.1.18 Therefore; according to above the inflation in Pakistan has increased by 18.8% since the time the learned Authority determined tariff of above referred 14 WPP's in 2018 and the benchmark US inflation also increased by 2.3% ; hence the reduction in EPC by 20% is not justified.

7.1.19 In light of the above; it is evident that the learned Authority has determined the EPC cost of the subject project to a level where they are not tenable and makes the project unviable.

7.1.20 Therefore, the Petitioner humbly requests the learned Authority to review the Impugned Decision and kindly consider revaluation of the EPC costs upwards to the tune of USD 54.5 Million.

7.2 Adjustments on Account of Non-EPC and Development Costs:

7.2.1 Project Development Cost (PDC):

7.2.1a The learned Authority in its Tariff Determination has approved the PDC of USD 1.677 Million on lump sum basis against USD 3.515 million as claimed by the Petitioner.

7.2.1b It is pertinent to mention here that during the hearing the petitioner had informed the learned Authority that the project had been initiated back in 2006 and the delays were attributed on part of Government Entities such as non-availability of land for 4 years, 2 years for rectification of land allotment, 1.5 years on account of non-provision of NTDC data for conducting GIS, 1.4 years for GIS approval and almost 1.9 years lost due to the

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confusing CCOE decision. Therefore the project has been delayed by more than 10 years while incurring development expenses.

7.2.1c If the policies and planning of the Government is consistent ; then the consumers won't be burdened with higher development costs and on the other hand it is also not fair to burden the investors with these costs due to lack of planning by the Government.

7.2.1d Moreover; the learned Authority approved PDC of USD 2.5 million for the 15 WPP's[3] between Aug to Nov 2018. The learned Authority has not provided any basis to reduce the PDC from USD 2.5 million to USD 1.677 million, a reduction of 33% and there is no evidence to suggest that the development costs have reduced by 33% over this period.

7.2.1e Moreover; the PDC in Pak Rs. in 2018 determinations was Rs. 300 million at an exchange rate of USD/Pak Rs 120; while the same in 2020 comes to Rs. 283 million at an exchange rate of USD/Pak Rs. 168.75. Keeping in view the increase in inflation as per above section; these calculations do not add up. Therefore; we request the learned Authority to provide us the working on which PDC has been reduced by 33%.

7.2.1f It is also pertinent to mention here that sizable share of the PDC is remitted to foreign consultants/advisors; hence any foreign commitments made by the project in 2018 would now cost the company 29% more due to the Pak Rs devaluation [USD/Rs exchange rate in 2018 tariff determinations of 15 WPP's was Rs. 120 while in its impugned decision the USD/Rs. exchange is taken as Rs.168.75].

7.2.1g Moreover; as highlighted in the above section; both local and international inflation has increased by 18.8% and 2.3% respectively since the time the learned Authority determined tariff of above referred 14 WPP's in 2018; therefore reduction in PDC is not justified.

7.2.1h In light of the above; the petitioner requests the authority to allow PDC of USD 2.5 million as awarded to above referred 15 WPP's.

7.2.2 Financing Fee and Charges:

7.2.2a The learned Authority in its impugned decision has approved the financing fee and charges of USD 0.768 million (2% of debt portion of capital cost) against USD 1.862 million as claimed by the Petitioner stating: Quote

"The Authority has noted that NEPRA (Benchmarks for Tariff Determination) Guidelines, 2018 ("NEPRA Benchmarking Guidelines") issued on June 19, 2018 states the provision of financing fee & charges not exceeding 2% of the approved debt amount of the capital expenses. In accordance with the said benchmark, the Authority has decided to allow the captioned cost at the rate of 2% of approved debt portion of allowed capital expenses, inclusive of taxes, charges and/or duties, to the petitioner. Accordingly, the amount being approved under this head works out to be around USD 0.768 million" Un-Quote

7.2.2b It is pertinent to mention here that the learned Authority approved Financing Fee and Charges of 2.5% of the debt portion of capital cost for the 15 WPP's[4] between Aug to Nov 2018 which were issued after the above referred guidelines.

[3] 15 WPP's = 1.Shaheen 2. Master Green Energy 3. Western Energy 4. Lakeside 5. Artistic 6. ACT2 7 DIN. 8. Metro Wind 9. Gul Ahmed Electric 10. Liberty (1) 11. Liberty (2) 12. Indus 13. Nasda 14. Tricom.15. Transatlantic

[4] 15 WPP's = 1.Shaheen 2. Master Green Energy 3. Western Energy 4. Lakeside 5. Artistic 6. ACT2 7 DIN. 8. Metro Wind 9. Gul Ahmed Electric 10. Liberty (1) 11. Liberty (2) 12. Indus 13. Nasda 14. Tricom.15. Transatlantic

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7.2.2c Moreover; the learned Authority has not provided any working on how the financing fee and charges have been reduced from 2.5% to 2% of the debt portion of the capital cost and there is no evidence to suggest that these costs have reduced over this period.

7.2.2d Furthermore; it is humbly submitted that the debt permitted to the project is based on the total project cost. The project cost includes financial charges and interest during construction; it is therefore not the correct methodology for the learned Authority to determine financial charges as a function of project cost less financial charges and interest during construction. Larger projects (in terms of total project cost) can hardly manage their fixed costs within a cap of 2.5% but it is not possible for smaller projects (in terms of total project cost) to manage financial charges within this benchmark.

7.2.2e In light of the above submissions; the petitioner requests the authority to allow financing fee and charges of 2.5% of total debt.

7.3 Adjustments on Account of O&M Costs:

7.3.1 The learned Authority in its impugned decision has approved Annual O&M costs of USD 1.050 million i.e USD 21,000 per MW per year (50% Local and 50% Foreign) against USD 1.9 million i.e USD 38,000 per MW per year (25% Local and 75% Foreign) as claimed in the tariff petition.

7.3.2 It is pertinent to mention here that the learned Authority approved Annual O&M Costs of USD 1.150 million i.e USD 23,000 per MW per year for the 16 WPP's[5] between Aug 2018 to Feb 2019. The learned Authority has not provided any justification to further reduce the annual O&M from 1.150 million to 1.050 million.

7.3.3 Moreover; during the project hearing held on Oct 2019; the petitioner highlighted the fact that the maintenance costs at Jhimpir are high due to certain factors including corrosion, dust, high temperature etc and requires additional resources to keep the thermal losses low. The learned Authority has access to the regulatory accounts of the operational WPP's and can review their O&M costs; especially the non-Chinese financed WPP's. The learned Authority may even think of increasing the annual O&M costs upwards of USD 1.150 that it awarded to the above referred 16 WPP's.

7.3.4 Moreover; it is also pertinent to mention here that reducing O&M costs would essentially mean shifting of risk on the owners; whom may end up with liabilities. The learned Authority is requested not to be too cost focus under this head.

7.3.5 Furthermore; the learned Authority has also added new condition in the impugned decision with regards to the O&M stating; Quote

"The Authority has decided to allow O&M cost into local and foreign components in the ratio of 50:50. Additionally, the Authority has decided that the approved O&M shall be applicable for first two years of operations. Afterward, the Authority may consider making revisions in the O&M cost, while capping the allowed prevailing level, anytime during the tariff control period. Those revisions may also entail changing the mix of the approved O&M cost (local and foreign) as well as the indexation mechanism (indices, frequency etc.). For that purpose, the Authority may also direct the petitioner to carry out the competitive bidding to select the contractor for the provision of the O&M cost." Un-Quote

7.3.6 It is pertinent to mention here that the learned authority issued the impugned tariff determinations of 3 WPP's[6] in Aug 2018 & also included similar clause related to carrying out competitive bidding for O&M. Thereafter;

[5] 16 WPP's = 1.Shaheen 2. Master Green Energy 3. Western Energy 4. Lakeside 5. Artistic 6. ACT2 7 DIN. 8. Metro Wind 9. Gul Ahmed Electric 10. Liberty (1) 11. Liberty (2) 12. Indus 13. Nasda 14. Tricom.15. Transatlantic 15. Burj

[6] 3 WPP's = 1. Shaheen 2. Master Green Energy 3. Western Energy

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above referred 3 WPP's determinations were revised based on their review motions and the authority in their cases issued revised decisions[7] on 12th Feb 2019 stating; Quote

"The Authority noted that it put the condition for O&M bidding in the tariff determinations of three wind power projects, including MGEL, issued on August 20, 2018. That condition was introduced to bring the best possible results for this particular component. A number of project companies opposed that condition while stating that lenders require getting O&M done through Original Equipment Manufacturer ("OEM") during the debt servicing period. Also, they submitted that the existing stage of wind industry in Pakistan is not at the stage where independent operators can take on the O&M of wind power plants to the satisfaction of the financiers. The Authority deliberated in detail about the submissions with respect to level of wind industry in Pakistan. Further, the Authority analysed the approved benchmark level of O&M and found that the said cost is quite competitive and fairly similar to the cost being allowed in the comparable places. In view thereof, the requirement of bidding for O&M contractor was removed in the later twelve wind tariff determinations issued on November 19, 2018. Accordingly, the Authority has decided to take out this condition of bidding for O&M contractor introduced in the impugned determination. However, it is to be noted the Authority may consider revising the approved O&M cost after the completion of debt servicing period."

7.3.7 In the forgoing para; the learned Authority themselves admitted that lenders require getting O&M done through Original Equipment Manufacturer ("OEM") during the debt servicing period. Therefore; the condition that the approved O&M costs will be allowed only for two years will be detrimental to securing financing for the project.

7.3.8 In light of the forgoing, the Petitioner humbly requests the learned Authority to review the Impugned Decision and may kindly consider:

i. revaluation of the O&M costs to the level it awarded to the above referred 16 WPP's.

ii. removing the condition that the approved O&M costs will only be allowed for first two years of operation as well as making any revisions in the O&M cost.

iii. removing the condition that the Authority may direct the petitioner to carry out competitive bidding to select the contractor for the provision of the O&M cost.

7.4 Adjustments on Account of ROE & Bonus Energy Mechanism:

7.4.1 The learned Authority in the subject tariff determination has allowed 13% return against 15% claimed by the petitioner in the tariff petition; stating: Quote

"The Authority allowed ROE of 14% in the tariffs of 15 wind power projects determined in 2018. It was noted that over the passage of time, the Authority has revised the equity returns downward for a number of generation technologies keeping in view the developments in those sectors. The Authority has noted that more than 1200 MWs of wind power projects in Sindh have become operational. Additionally, twelve wind projects have achieved Financial Close and shall be online sometime in 2021. Further, it has been learnt that wind power projects having capacity of more than 2,000 MWs to be setup in Sindh have obtained LOIs from different facilitating agencies. This makes it quite clear that risk profile for developing wind projects, especially

[7] Case No. NEPRA/TRF-412/MGEL/2017 of Master Green Energy Limited

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in the province of Sindh, has reduced considerably. In view thereof, the Authority has decided to approve 13% ROE for the petitioner." Un-Quote

7.4.2 The learned Authority has based its decision on the fact that the risk profile of wind power projects has reduced as more than 2,000 MW of wind power projects have been issued letters of intent by the Government of Sindh.

7.4.3 It is pertinent to mention here that; while it is heartwarming to note that there is much interest in the Wind Sector; especially in Sindh province; however merely having LOI does not ensure that the project will materialize. Due to various bottlenecks; project development and ultimately commercial operation takes years in Pakistan; gauging from the fact that the subject project has spent more than 10 years to get to this stage. Furthermore; the petitioner's project was developed diligently in order to apply for upfront tariff of 2015 offering 17% return. Unfortunately, the project was unable to get the upfront tariff due to delays solely attributable to various entities of the Government of Pakistan. It is worth highlighting that the project completed all requisite activities specified in its letter of intent before expiry of the timeframe specified for the same. Moreover, the continuing inability of the power purchaser to provide a stable grid for evacuation of power generated by wind power projects currently in operation continues to plague the sector and results in hefty financial losses.

7.4.4 Furthermore; the learned authority themselves in the above referred paragraph have highlighted the Wind Power projects that have been implemented since the policy for R.E was announced in 2006. Accordingly; so far 24 WPP's [approx. 1200 MW's] have achieved commercial operation and additionally 12 more have achieved financial close; in essence 36 WPP's [approx. 1,800 MW's] will be operational by 2021 over a period of 15 years at an average of 2.4 projects per year only; which is extremely less when compared to projects being installed in other so called low risk markets.

7.4.5 Moreover; the Federal Government made changes in the withholding tax regime of power producers post 2018[x]; whereby those power producers whose withholding tax on dividends is not a pass through item; their tax rate has been increased from 7.5% to 15% and since NEPRA has not made withholding tax on dividend a pass through item for petitioners project; therefore the ROE of the petitioners project is further reduced.

7.4.6 Additionally; project sponsors also have to open contingency L/C's to cover debt service and cost overruns; the cost of which further reduces the ROE.

7.4.7 In total; a drop of 5% in ROE is expected under these heads. In such circumstances; the investors will then turn to other avenues for investments that may offer equal or higher risk free returns which will be detrimental to the sector.

7.4.8 In the impugned decision; the learned Authority has added a new condition for sharing of profits between the company and consumers; Quote:

"In case the company earns annual profit in excess of the approved return on equity (including ROEDC), then that extra amount shall be shared between the power producer and consumers through claw back formula to be decided by the Authority. For that sharing, the share of producer as given in the bonus energy mechanism shall be taken into account." Un-Quote

7.4.9 It is pertinent to mention here that even before addition of the above clause; savings; if any; from certified emission reductions, cost of financing etc were to be shared between the company and power purchaser. How is it fair that the company takes all the risk; including wind risk as well as does all the investment; while the savings are to be shared either with the power purchaser or the consumer? The consumers or the power purchaser is not sharing the wind risk with the company; so if in a year the company makes a loss [ROE less than the projected] then will the consumer share the loss with the company and compensate the same next

Iran Pak Wind Power (Pvt) Limited ★ Karachi year? Moreover; the learned Authority should also share the claw back formula through which it plans to share the excess return with the consumers.

7.4.10 Furthermore; the learned Authority has also added a new clause in the impugned decision with regards to the payment of ROE (including ROEDC) stating: Quote

"The payment of ROE (including ROEDC) components of tariff shall be due to be made at the end of respective years." Un-Quote

7.4.11 It is pertinent to mention here that the company must keep a certain amount of cash flows at each debt repayment period; hence it is not possible to receive ROE at year end

7.4.12 On the other hand; the mechanism of bonus energy has also been changed heavily in favor of the power purchaser as per the comparison given in Table 3 below:

Table 3 - COMPARISON OF BONUS ENERGY SHARING BETWEEN POWER PURCHASER AND POWER PRODUCER

2018 NEPRA DETERMINATIONS		2020 NEPRA DETERMINATION OF IPWPPL	
Net annual plant capacity factor	% of prevalent tariff allowed to power producer	Net annual plant capacity factor	% of prevalent tariff allowed to power producer
Above 38% up to 40%	5%	Above 44.5% up to 46.5%	-
Above 40% up to 42%	10%	Above 46.5% up to 47.5%	10%
Above 42% up to 44%	20%	Above 47.5% up to 48.5%	20%
Above 44% up to 46%	40%	Above 48.5% up to 49.5%	30%
Above 46% up to 48%	80%	-	-
Above 48%	100%	Above 49.5%	40%

Source: NEPRA Determinations of 10 WPP's [xi]

7.4.13 On top of reducing the ROE; the bonus energy tabulations have also been changed whereby the power producer will get 0% of revenue if it produces power 2% over the benchmark CF; which is essentially saying that the project will produce power for free without incurring any operational expenses? In 2018 determinations; 5% of the revenue was given to the power producer.

7.4.14 On the other hand; the upside has been restricted to only 40% of the tariff; while in 2018 determinations 100% of the upside was being given to the power producer. Moreover; while upside is being restricted; there is no protection for the company on the downside. This will not be beneficial for the sector as it will discourage efficiency and future investments and will further hamper the ROE.

7.4.15 Finally; as already stated in the above referred paragraph the learned Authority has allowed ROE of 14% in the tariffs of 15 wind power projects determined in 2018.

7.4.16 In view of foregoing the petitioner humbly requests the learned Authority:

i. to allow a return on equity of 14% which is already 3% lower than originally expected by the project.

ii. to remove the condition regarding sharing of excess profits above the allowed ROE between the company and the power producer

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iii. to keep same the bonus energy mechanism as in 2018 determinations.

iv. to kindly remove the condition of payment of ROE (Including ROEDC) at the end of each year.

v. to calculate ROE net of withholding tax

7.5 Adjustments on Account of Capacity Factor:

7.5.1 The learned Authority in its impugned decision has allowed a Capacity Factor **[CF]** of 44.5% against 38% as claimed in the tariff petition based on the Wind Resource and Energy Yield Assessment Report (**"Energy Report"**) of the Project.

7.5.2 In arriving at the CF of 44.5% ; the learned authority in its impugned determination stated; Quote

"To assess the annual capacity factor, the Authority has analyzed the data of energy yields of currently operational wind power plants in the country. The data of energy yields in different regions of the world and their trend in last couple of years has also been reviewed. It has been noted that worldwide, the capacity factors have improved as new machines are yielding better energy output within a given wind resource regime." Un-Quote

7.5.3 It is pertinent to mention here that the impugned decision has not provided any specific details on the tools that it used to arrive at the CF of 44.5%. We request the learned Authority to share basis on which it determined CF as high as 44.5%.

7.5.4 The impugned decision further states that; Quote

"These improvements have also been noted while comparing the energy production of old and newly commissioned wind power projects in Jhimpir region. It is found that the primary reason of these better results has been the change in turbine design through improvement in hub height, nameplate capacity and especially the enhancement in rotor diameters." Un-Quote

7.5.5 It is pertinent to note that the petitioner's project is using the same technology with similar hub height and located in the same region i.e Jhimpir as the 5 WPP's[8] whose tariff was determined by the learned authority in Nov 2018 assuming a CF of 38%. Therefore increasing the CF of the petitioner's project on the grounds that there has been any change in turbine design through improvement in hub height, nameplate capacity or enhancement in rotor diameters is unfounded. There is also no data or evidence to suggest that the wind regime in the Jhimpir region have materially changed in the last two years. Furthermore; these 5 WPP's are not operational.

7.5.6 Moreover; it is also important to cognize the fact that after the learned authority issued the impugned tariff determinations of 3 WPP's[9] in Aug 2018 at higher CF's than their energy reports; it received submissions from financial institutions against determining such high CF's. Thereafter; above referred 3 WPP's CF's were revised based on their review motions and the authority in their cases issued revised decisions[10] on 12th Feb 2019 stating; Quote

"The Authority has noted that the capacity factor approved in the impugned determination was assessed by NEPRA using the standard tools. Afterwards, the Authority has issued tariff determination of another twelve

[8] 5 WPP's of 50 MW in Jhimpir Region using Gamesa G114 2.0 MW turbine = 1. Liberty (1) 2. Liberty (2) 3. Metro Wind 4.DIN 5. Tricom
[9] 3 WPP's = 1. Shaheen 2. Master Green Energy 3. Western Energy
[10] Case No. NEPRA/TRF-412/MGEL/2017 of Master Green Energy Limited

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wind power projects. In those twelve determinations, the capacity factor was approved based on the results of Energy Reports as submitted by those project companies. This premise was changed primarily in light of the submissions of the financiers such as Asian Development Bank and International Finance Corporation. Those financiers approached the Authority stating that it may not be viable for them to finance wind power projects on the basis as adopted by NEPRA to assess capacity factor. They requested the Authority that tariff of wind power projects should be set on a good probability level, preferably as given in their Energy Reports. They further submitted that the tariffs of wind power projects throughout the world are set on energy yield having higher possibility, mainly for financing purpose. Based on those submissions, the Authority approved capacity factors of those projects based on their Energy Reports." *Un-Quote*

7.5.7 In between ; based on the recommendations of the above mentioned financial institutions; the learned authority issued tariff determinations of 10 other WPP's[11] between Nov 2018 and Feb 2019 having CF's of 38%; out of which above referred 5 WPP's CF was determined based on the same technology, hub height and region as the subject project.

7.5.8 Moreover; 12 WPP's[12] submitted tariff modification applications in Oct 2019 and were interested in modifying only a couple of parameters of their determinations. The Authority issued a notice of hearing to all stakeholders to which CPPAGL commented vide its letter dated 7th January 2020 stating: *Quote*

"It is submitted that, in the due process of subject tariff modification in respect of 12 wind power plants, the Authority should also review/revisit other pertinent parameters". *Un-Quote*

7.5.9 CPPAGL wanted all of the tariff parameters including the Capacity Factor to be revisited. The Authority in its decisions on the tariff modification applications dated July 23rd 2020 stated: Quote

"The Authority deliberated in detail on the comments advanced by CPPAGL and the response thereon cis submitted by the project company. The Authority agrees with the petitioner that under the Modification Petition it has actually asked for certain adjustment that were allowed in the Tariff Determination. However, CPPAGL has commented for the redetermination of tariff. The Authority considers that Tariff Determination was approved based on certain technology and with the timeline of achieving FC. The petitioner has not made any changes in the approved technology and has achieved FC in the given timeline. Therefore, it does not warrant any revision in tariff merely because the allowed adjustments have been sought by the petitioner before the stated time." *Un-Quote*

7.5.10 It is quite evident form the above paragraph that the learned Authority re-iterated that since no change in approved technology has taken place; hence it does not warrant any change in other parameters including CF.

7.5.11 In light of the above facts; the CF of 44.5% derived in the impugned decision is not only unfounded, unachievable, unrealistic and unviable but also against the learned authority's own recent submissions and will render the project non-bankable.

7.5.12 Therefore, it is humbly requested that since the technology being used in the petitioners project is the same as the ones used in determinations of the above referred 5 WPP's and as the learned Authority has conceded as late as 23rd July 2020 that the capacity factors approved for specific technology are up-to-date; therefore keeping in mind the submitted project energy report; the CF should remain at 38%.

[11] 10 WPP's = 1. Artistic 2. ACT2 3 DIN. 4. Metro Wind 5. Gul Ahmed Electric 6. Liberty (1) 7. Liberty (2) 8 Indus 9. Tricom 10. Western
[12] 12 WPP's = 1. Artistic 2. ACT2 3 DIN. 4. Metro Wind 5. Gul Ahmed Electric 6. Liberty (1) 7. Liberty (2) 8 Indus 9. Tricom 10. Master Green Energy 11. Lakeside 12. Nasda

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7.6 Adjustments on Account of Time to Achieve Financial Close:

7.6.1 The learned Authority in its impugned decision has allowed a time of one year from the date of tariff determination to achieve financial close.

7.6.2 Moreover; it is also important to cognize the fact that after the learned authority issued the impugned tariff determinations of 3 WPP's[13] on 20th Aug 2018; all three filed review motions. The revised tariff determinations of all three were issued on 12th Feb 2019; approximately 6 months after their impugned decisions.

7.6.3 It is further pertinent to mention that out of the three projects; two projects i.e. M/S Shaheen and M/S Western could not achieve financial close due to time constraints; as one of them M/S Shaheen even filed a 2nd review motion for extension in time for achieving financial close to one year from the date of the decision on its motion for leave.

7.6.4 Moreover; the learned Authority themselves in their decision in the matter of review motion filed by M/S Master Green Energy Limited[14] stated that; Quote

"several milestones need to be completed post award of tariff till financial close." Un-Quote

7.6.5 As evident from the contents of this motion for leave; there are many heads that need adjustment leaving the project exposed to great uncertainty. Under these circumstances; it will be next to impossible to complete further milestones such as project financing etc until the review decision.

7.6.6 Therefore ; since the company is now filing motion for leave against the impugned decision; it humbly requests the learned Authority:

i. to set and communicate a timeline for the decision on this review motion.

ii. to allow one year time to achieve financial close from the date of review decision less 10 days allowed to petitioner for filling the motion for leave.

7.7 Adjustments on Account of NPMV:

7.7.1 It is humbly submitted that the learned Authority has overlooked petitioners request regarding Non Project Missed Volume ("NPMV") in its tariff petition; whereby it was asked to allow compensation to the project, in case of inability of the power purchaser to evacuate power produced by the project, on the same basis as per which penalties are imposed on it; given that there are sophisticated SCADA systems and forecasting tools available to ascertain missed generation.

7.7.2 It is pertinent to mention here that given the current situation of wind power projects; the power purchaser continues to curtail, due to grid constraints, wind power projects; especially during summer months (high wind season).

7.7.3 In light of the above; it is requested to allow compensation to the project in case of non-evacuation on the same basis as per which penalties are imposed on it.

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13 3 WPP's = 1. Shaheen 2. Master Green Energy 3. Western Energy
14 Case No. NEPRA/TRF-412/MGEL/2017 of Master Green Energy Limited

8. PRAYER:

8.1 In light of the above and in order to avoid significant injustice, the Company respectfully prays that:

I. This motion for leave for review may graciously be accepted and the Impugned Decision be modified accordingly.

II. Any other relief which is just, proper and better may also be awarded.

Iran-Pak Wind Power (Pvt) Limited Karachi

Khurram Sayeed
Chief Executive Officer
Iran-Pak Wind Power (Pvt.) Limited

Iran-Pak Wind Power (Pvt) Limited Karachi