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No. NEPRA/R/ADG(Trf)/TRF-512/TWEL-2019/67-71

January 02, 2026

Subject: Decision of the National Electric Power Regulatory Authority in the matter of tariff Adjustment at Commercial Operations Date of Indus Wind Energy Limited

Dear Sir,

Please find enclosed herewith the subject Decision of the Authority alongwith **Annex-I, II & III** (total 30 pages) regarding tariff Adjustment at Commercial Operations Date of Indus Wind Energy Limited in Case No. NEPRA/ TRF-512/TWEL-2019.

2. The Decision is being intimated to the Federal Government for the purpose of notification in the official Gazette pursuant to Section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 within 30 Calendar days from the intimation of this Decision. In the event the Federal Government fails to notify the subject tariff Decision within the time period specified in Section 31(7), then the Authority shall notify the same in the official Gazette pursuant to Section 31(7) of NEPRA Act.

Enclosure: As above


(Wasim Anwar Bhinder)

Secretary,
Ministry of Energy (Power Division),
'A' Block, Pak Secretariat,
Islamabad.

Copy to:

1. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad
2. Mr. Shehriyar Abbasi, Deputy Secretary, Cabinet Division, Cabinet Secretariat, Islamabad
3. Chief Executive Officer, Central Power Purchasing Agency Guarantee Limited (CPPA-G), Shaheen Plaza, 73-West, Fazl-e-Haq Road, Islamabad
4. Chief Executive Officer, Indus Wind Energy Ltd. 5th Floor, Office No. 508, Beaumont Plaza, Civil Lines Quarters, Karachi



**DECISION OF THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY IN THE MATTER OF
TARIFF ADJUSTMENT AT COMMERCIAL OPERATIONS DATE OF INDUS WIND ENERGY LIMITED**

Background/Facts:

1. M/s. Indus Wind Energy Limited. (the "IWEL" or "Petitioner" or "Company") has been established to develop 50 MW wind power plant (the "Project"). The National Electric Power Regulatory Authority (the "NEPRA" or "Authority") granted a Generation License to the Company on August 16, 2017 and modification in the matter was issued on October 07, 2019.
2. Later on, the Authority approved levelized tariff of Rs. 5.7517/kWh (US Cents 4.7931/kWh) of the Company through its determination on November 19, 2018. Thereafter, the Authority on the tariff modification petition tendered its decision on July 23, 2020. Subsequently, the Authority also issued its decision dated May 17, 2021 on the motion for leave for review filed by IWEL against the tariff modification decision. All these decisions whether referred collectively or individually shall hereinafter be referred to as the "Tariff Determination").

Adjustment of Tariff at Commercial Operations Date:

3. Following mechanism was approved in the Tariff Determination for the adjustment of tariff at the Commercial Operations Date ("COD") of the Company:
 - The EPC cost shall be adjusted at actual considering the approved amount as the maximum limit. Applicable foreign portion of the EPC cost will be adjusted at COD on account of variation in PKR/USD parity, on production of authentic documentary evidence to the satisfaction of the Authority. The adjustment in approved EPC cost shall be made only for the currency fluctuation against the reference parity values.
 - The Petitioner has submitted M/s TUV Nord certification No. 4422016672205-TC-IEC, Rev-2 date June 23, 2017 about the design, specification and country of origin of various component of the wind turbine to be installed for this project. At the time of COD stage tariff adjustments, the Petitioner will have to provide a confirmation from the EPC contractor as to the fullest compliance of the equipment having same design and origin of manufacture as given in the type certificate. Where needed, the bill of lading and other support documents will also have to be submitted.
 - PDC, Insurance During Construction (IDC) and Financing Fee and Charges shall be adjusted at actual at the time of COD considering the approved amount as the maximum limit. The amounts allowed on these accounts in USD will be converted in PKR using the reference PKR/USD rate of 120 to calculate the maximum limit of the amount to be allowed at COD.
 - Duties and/or taxes, not being of refundable nature, relating to the construction period directly imposed on the Company up to COD will be allowed at actual upon production of verifiable documentary evidence to the satisfaction of the Authority.
 - IDC will be recomputed at COD on the basis of actual timing of debt draw downs (for the overall debt allowed by the Authority at COD) for the project construction period of fifteen months allowed by the Authority. For full/part of conventional local or foreign loans or a mix of both, if availed by the Company, the IDC shall also be allowed adjustment for change in applicable KIBOR/LIBOR.

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- The tariff has been determined on debt: equity ratio of 80:20. The tariff shall be adjusted on actual debt: equity mix at the time of COD, subject to equity share of not more than 20%. For equity share of more than 20%, allowed IRR shall be neutralized for the additional cost of debt: equity ratio.
- The reference tariff has been worked out on the basis of cost of 6% offered under SBP financing scheme. In case cost negotiated by the Company under SBP scheme is less than the said limit of 6%, the savings in that cost shall be shared between the power purchaser and the power producer in the ratio of 60:40 respectively. For full or part of local or foreign loan, if any, the savings in the approved spreads shall be shared between the power purchaser and power producer in the ratio of 60:40.
- ROEDC will be adjusted at COD on the basis of actual equity injections (within the overall equity allowed by the Authority at COD) for the project construction period of fifteen months allowed by the Authority.

4. The Authority vide Tariff review decision issued on May 17, 2021, changed the adjustment clause with respect to O&M component of tariff which is produced below:

- The O&M cost, its mix, and the corresponding mechanism thereof as approved in the Tariff Determination of Indus Wind Energy Limited shall be applicable for the period during which the Petitioner has already finalized the Warranty Period (WP) and Long Term (LT) O&M Agreements, i.e. 13 years. During this time, however, the Petitioner shall be required to submit, on an annual basis, the documentary evidence/report pertaining to actual expenditures on account of O&M. The savings, if any, in the actual O&M cost compared to the approved O&M cost shall completely be passed on to the consumers.
- Subsequent to the lapse of the LT O&M Contract, in order to claim O&M costs, the Petitioner shall be required to carry out competitive bidding for the selection of the O&M contractor in accordance with NEPRA's applicable law. Based on this competitive bidding process, the Authority shall make revisions in the O&M cost, while capping the prevailing level of the approved O&M cost. 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.)."

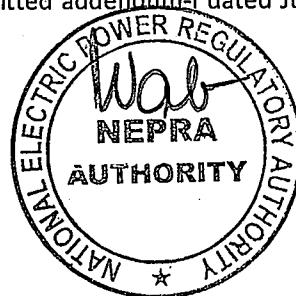
Filing of Tariff Adjustment Request at COD

5. IWEL submitted that the Company has successfully achieved Commercial Operations Date ("COD") on March 25, 2022 at 00:00 Hrs. In this regard IWEL has submitted notification of COD of Complex issued by Central Power Purchasing Agency (Guaranteee) Limited (CPPAGL), wherein it is stated that pursuant to issuance of certificate of the "Commissioning of the Complex" by the Engineer (M/S OMS (Pvt) Limited) on March 24, 2022, the COD of the Complex is notified w.e.f. March 25, 2022 at 00:00 Hrs.

6. The Company through letter No. IWEL-NEPRA-TRUEUP-01 dated December 16, 2022 submitted its request for adjustment of tariff at COD ("COD Application") along with supporting documents. The Company requested to adjust / true-up the relevant tariff components in line with the parameters defined in the Tariff Determination.

7. It was noted that the information submitted by IWEL along with its request for adjustment of tariff were not complete. Accordingly, IWEL was repeatedly required to furnish the requisite information through emails and telephonic communications. IWEL submitted addendum-1 dated July 14, 2023

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and addendum-2 dated September 07, 2023 to COD application regarding payment of outstanding payable EPC cost and insurance during construction cost. IWEL also submitted an Undertaking for Correctness of Information dated May 31, 2024 wherein IWEL has mentioned that the information/data submitted is correct and nothing has been concealed or misstated.

- Below is the summary of project cost allowed by the Authority in the Tariff Determination and claimed by IWEL in its tariff adjustment application dated December 16, 2022 and subsequent addendums:

Project Cost Heads	Determined		Claimed at COD	
	(USD million)	(PKR million)	(USD million)	(PKR million)
EPC Cost	58.10	6971.76	58.10	9,436.39
EPC Contractor Claims	-	-	5.69	1,036.15
Duties and Taxes	At actual		0.58	91.19
Project Development Cost	2.50	300.00	2.96	452.82
Insurance during construction	0.29	34.80	0.31	51.80
Financial Fee and Charges	1.22	146.16	1.72	282.35
Interest during Construction	1.97	235.92	1.97	343.29
Total Project Cost	64.07	7,688.64	71.33	11,693.98

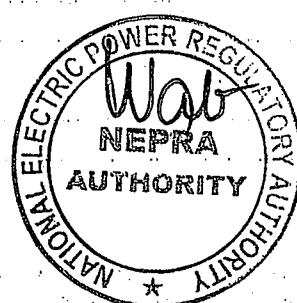
Audit of Project Cost:

- IWEL submitted Audit Report of the claimed project cost conducted by Naveed Zafar Ashfaq Jaffery & Co. Chartered Accountants dated January 24, 2023. In the said report the project as verified by the Auditors is given below:

Project Cost	USD (million)	PKR (million)
EPC Cost	58.10	9,436.39
Duties and Taxes	0.58	91.19
Project Development Cost and Non-EPC cost	2.96	452.82
Insurance during construction	0.31	51.80
Financial Fee and Charges	1.72	282.35
Interest during Construction	1.97	343.29
Total Project Cost	65.64	10,657.84

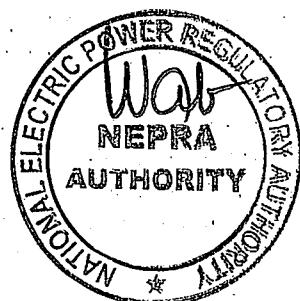
Force Majeure and Construction Period:

- The Tariff Determination stipulated that "The targeted maximum construction period after financial close is fifteen months. No adjustment will be allowed in this tariff to account for financial impact of any delay in project construction. However, the failure of the Company to complete construction within fifteen months will not invalidate the tariff granted to it."





11. In the tariff adjustment application and during the processing thereof, IWEL informed that Post issuance of the Tariff Determination, IWEL obtained Letter of Support ("LOS") from Alternative Energy Development Board ("AEDB") on November 08, 2019, signed the Energy Purchase Agreement ("EPA") with CPPAGL on November 09, 2019 and signed Implementation Agreement ("IA") with GoP on November 12, 2019. Consequently, IWEL achieved Financial Closing ("FC") on November 18, 2019.
12. In the EPA, the Required Commercial Operations Date ("RCOD") is defined as the date that is fifteen (15) months following the Construction Start Date occurs, i.e. in the instant matter the RCOD comes out as October 24, 2021. However, IWEL achieved Commercial Operations Date ("COD") with effect from March 25, 2022 at 00:00 Hrs.
13. In the tariff adjustment application, IWEL has requested construction period of about 20 months from the construction start date i.e. from July 24, 2020 till actual COD i.e. March 25, 2022. The main reason for delay in achieving COD as cited by IWEL was Covid-19 Pandemic; IWEL further submitted that the purchaser's obligations of completion of interconnection facilities within the timelines prescribed in the EPA was severely impacted due to Covid-19 resulting delay in supply chain, testing delay, equipment and employee movement restrictions, health and safety of workers, etc. Accordingly, National Transmission and Despatch Company Limited (Now National Grid Company (NGC)) issued FME notices to CPPAG on February 6, 2020 and then on March 17, 2020. IWEL further submitted that subsequently CPPAG vide letter dated March 25, 2020 issued to NGC acknowledged the delays caused due to Covid-19 and accounted for as a Force Majeure Event (FME). Further, CPPAG vide letter dated March 27, 2020 issued a notice of Other Force Majeure Event ("OFME") to IWEL of complete halt of Purchaser Interconnection works.
14. IWEL submitted that due to the situation prevailing during Pandemic, the EPC contractors issued FME notices to it, pursuant to relevant provisions under the construction (onshore) and supply (offshore) contracts. According to the IWEL, upon receipt of force majeure notices from EPC contractors, the Company also issued notices to the CPPAGL on April 2, 2020. IWEL submitted that CPPAG vide letter dated October 26, 2020 issued notice of cessation of OFME to IWEL whereby CPPAG intimated IWEL that the pandemic (Covid-19) OFME claimed has ceased w.e.f. September 30, 2020. The notice further states that the interconnection related activities & works have recommenced as of October 1, 2020. IWEL further submitted that as per EPA the construction of 15 months ended on October 24, 2021. However, the Company achieved COD on March 25, 2022 due to Covid-19 pandemic and non-availability of interconnection facility until January 26, 2022. As per IWEL, the actual COD achieved before the revised RCOD of March 26, 2022 as per EPA.
15. Stating above, IWEL submitted that the FME period applicable to the Purchaser interconnection works out from February 6, 2020 till September 30, 2020 is calculated to be 237 days. As per EPA, the date of readiness of purchaser interconnection facility was August 31, 2021. However, NGC was unable to provide interconnection facilities due to which the RCOD as per EPA was revised to March 26, 2022. Thus, the cumulative impact of Covid-19 and interconnection delay resulted in an actual delay of 385 days (237 as OFME and 148 interconnection) in completion of Purchaser interconnection facilities. IWEL in support of its claim submitted certificate of readiness for energization issued on December 20, 2021 by the Independent Engineer.
16. For justification of the extended period claims, IWEL also referred the Authority's modification decision in the cases of Pak Matiari-Lahore Transmission Company (Pvt) Limited ("PMLTC") dated September 2, 2021, COD decision of Uch-II Power (Pvt) Limited dated July 3, 2017 and Sapphire





Electric Company Limited ("SECL") review motion decision dated November 23, 2012. Keeping in view aforesaid facts, IWEL requested to allow extension in RCOD and the associated costs up to COD.

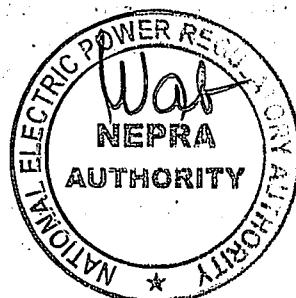
17. The Authority has noted that under the EPA signed between IWEL and CPPA-G, a complete chapter is devoted to the FME. The FMEs have been divided into 03 categories namely, i.e. (i) CLFME (ii) PPFME and (iii) OFME. The instances under which above stated FMEs can be invoked have also been listed under the respective categories. The Authority further noted that the compensation to the power producer due to the delay in the construction period has only been allowed under CLFME and PPFME, whereas no such compensation is provided for the occurrence of OFME. However, it is given in the EPA that the timelines that the parties are obligated to meet shall be extended. Particularly, it is provided in the EPA that COD shall be extended on day-for-day basis in case of FME that materially and adversely affects the purchaser's ability to perform its obligations.
18. As far as the cases (Uch-II, Sapphire) are concerned, these cases are distinguishable from the present case and further in recent precedents the Authority has consistently departed from this practice keeping in view the facts that the parties while signing the contracts should actually take into account the potential risks and the mechanism for the compensation thereof. In the absence of any such compensation on the occurrence of OFME, it is not appropriate to allow any additional cost to the Petitioner in this respect.
19. It is pertinent to mention here that considering the comments of CPPA-G and AEDB in similar case of MGEL, the Authority decided not to account for the additional cost claimed by MGEL on account of OFME/extension in RCOD. In addition, the Authority has noted that the Petitioner itself acknowledged that in case of PMLTCP, the Authority allowed extension in RCOD without allied cost. Further, the Authority in recent COD tariff adjustment case of Lucky Renewables (Pvt) Ltd (LRPL) did not allow any compensation on account of OFME. In view of the foregoing facts and established precedents, the Authority finds the instant request of IWEL is not justified.
20. The Authority has noted that Tariff Determination provided 15 months construction period after financial close to IWEL. CPPA-G declared cessation of OFME of IWEL w.e.f September 30, 2020 and clarified the recommencement of construction works on October 1, 2020. Accordingly, the 15 months construction period comes out from October 1, 2020 till December 31, 2021 as per the Tariff Determination.
21. Keeping in view the above, the Authority has decided to disallow IDC and Return on Equity during Construction ("ROEDC") for the period declared as OFME i.e. from February 06, 2020 till September 30, 2020 since no compensation for the OFME period is provided in the EPA. Accordingly, the Authority has decided to allow IDC and ROEDC for the construction period of 15 months from recommencement of construction works (October 01, 2020) till revised RCOD (December 31, 2021) and hereby allowed for the purpose of calculations of IDC and ROEDC.

Adjustment of Engineering Procurement and Construction Cost:

22. The Authority in the Tariff Determination dated November 19, 2018 allowed USD 58.10 million to IWEL while stating the following mechanism for its adjustment at COD;

"The EPC cost shall be adjusted at actual considering the approved amount as the maximum limit. Applicable foreign portion of the EPC cost will be adjusted at COD on account of variation in PKR/USD parity, on production of authentic documentary evidence to the satisfaction of the Authority. The adjustment in approved EPC cost shall be made only for the currency fluctuation against the reference parity values."

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.....the Petitioner will have to provide a confirmation from the EPC contractor as to the fullest compliance of the equipment having same design and origin of manufacture as given in the type certificate. Where needed, the bill of lading and other support documents will also have to be submitted."

23. IWEL in its adjustment request has claimed EPC cost of USD 58.10 million (PKR. 9,436.39 million). The breakup of the EPC cost as approved in the Tariff Determination, claimed by IWEL and verified in the Audit Report is given hereunder:

Description	Tariff Determination		Claimed at COD		Audit Report	
	USD	PKR	USD	PKR	USD	PKR
	(Million)					
Offshore EPC	58.10	6,971.76	46.00	7,465.85	46.00	7,465.86
Onshore EPC			12.10	1,970.53	12.10	1,970.53
Total	58.10	6,971.76	58.10	9,436.39	58.10	9,436.39

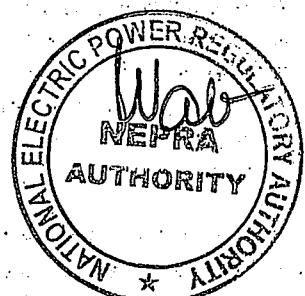
Offshore EPC Cost:

24. For the claim of EPC offshore cost, the Petitioner has submitted copy of offshore Equipment Supply Contract ("E^SC") dated July 04, 2019 signed with Hangzhou Huachen Electric Power Control Company Limited ("HEPCCL") for the amount of USD 46.00 million along with subsequent amendments. In addition to above said contract, IWEL also submitted copies of commercial invoices, Payment instructions, relevant bank statements, SBP and NBP exchange rate sheets. Further, the milestone completion certificates issued by Consortium of Tractebel Engineering GmbH and Renewable Resources (Pvt) Limited (herein referred to as "Owner's Engineer" or "OE") and import documents such as copy of Commercial Invoices, Goods Declaration ("GD") and Bill of Lading ("BL") were also submitted by IWEL.

25. IWEL has also submitted Certificate of Compliance issued by equipment supplier i.e. HHEPCCL dated December 01, 2022 wherein HHEPCCL has confirmed that all the WTGs supplied under the Contract fully comply with the Type Certificate bearing registration no. "44 220 16672205-TC-IEC, Rev. 2" dated June 23rd, 2017, issued by TUV and provided to the Employer.

26. The Audit Report provides that the schedule of costs, as prepared by the management of the Company, with respect to EPC offshore was obtained. Consequently, the amounts paid and other details appearing therein were matched with the respective invoice dates, invoice amount in USD, exchange rate and payment date with copy of commercial invoice, milestone completion certificate, swift acknowledgement, SBP exchange rate sheet/ Brecorder.com exchange rate sheet (for payments made from Habib Bank Limited Pakistan) and bank statement, where applicable and no difference was found. The Audit report also indicated payable amount which is converted into Pakistan rupee based on exchange rate as of date of COD for the Equipment supply contract.

27. In the supply contract, it is noted that the price of USD 46.00 million was agreed between the parties. They also agreed on the schedule stating the different milestones based on which the above price was to be paid to the supply contractor. It is noted that as per the milestone schedule the cost of the equipment under different milestones is USD 41.4 million while the rest of the payment pertains to the completion of Reliability Run Tests of Complex and Taking over certificate which amounts to USD 4.60 million.





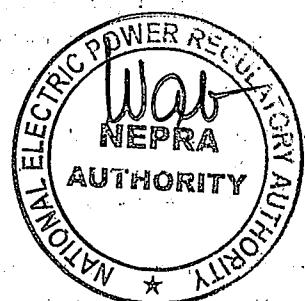
28. It is noted that IWEL has made payments of EPC offshore cost from HBL Bank - USD Proceed Account and HBL Bank - PKR Proceed Account. For the payments made from USD Account, IWEL has used the exchange rates applicable on the payment dates, as obtained from the NBP website, to compute the corresponding PKR amount. For the payments made from PKR Account, the Petitioner has used exchange rates applicable on payment dates or as fixed with the said banks vide payment instruction.
29. Based on the above, the comparison of offshore EPC cost, as claimed by IWEL, verified by auditors and as being allowed is given below:

EPC Offshore	Claimed by IWEL		Verified by Auditors		Approved	
	USD	PKR	USD	PKR	USD	PKR
	(Million)					
	46.00	7,465.85	46.00	7,465.85	46.00	7,439.06

30. The reason of difference of PKR 26.80 million between Offshore cost claimed by IWEL and approved is due to the exchange rate variations. In this decision, for the EPC Offshore payments made after revised RCOD, the exchange rate of PKR 177.95/USD prevailing on the date of revised RCOD has been used in line with the similar cases.

Onshore EPC Cost

31. For the claim of the EPC onshore cost, the Petitioner has submitted copy of EPC construction contract dated July 04, 2019 signed with Hydrochina International Engineering Company (Pvt) Limited ("HIECL") for USD 12.10 million. In addition to the said contract, IWEL also submitted copies of sales tax invoices, pay orders, relevant bank statements, State Bank of Pakistan ("SBP") weighted average customer exchange rates sheets, Withholding Tax ("WHT"), Computerized Payment Receipts ("CPR"), milestone completion certificates issued by Owner's Engineer (i.e. Consortium of Tractebel Engineering GmbH and Renewable Resources (Pvt) Limited). Further, the Petitioner submitted copies of amendments made to Construction Contract.
32. The Audit Report provides that the schedule of costs, as prepared by management of the Company, with respect to EPC onshore was obtained. Consequently, the amounts paid and other details appearing therein were matched with respect to the invoice date, invoice amount, payment date with copy of vendor invoice, sales tax invoice, SBP's weighted average exchange rates sheets, cheque, CPR for WHT paid to FBR, CPR number with copy of sales tax invoice, pay order and CPR to Sindh Revenue Board ("SRB") and bank statement, where applicable and no difference was found. The Audit report further stated that for the Amounts Payable, schedule of costs prepared by management were obtained and matched with the Schedule of Payment of Contracts and converted into Pakistan Rupee as per the mechanism defined under the contract.
33. In the onshore contract, it is noted that the price of USD 12.10 million was agreed between the parties. The parties also agreed on the schedule based on milestones for the payment. It is noted that IWEL has made payments of EPC onshore cost from Habib Bank Limited PKR account.
34. The onshore contract provides that 50% of the USD amount shall be converted into equivalent PKR at the exchange rate on the date of Notice to Proceed (PKR 166.4548/USD prevailing on July 06, 2020) while the remaining 50% will be converted into equivalent PKR on the date of payment. In each case, the SBP weighted average exchange rates (sell side) of USD/PKR has been considered. The Authority has noted that IWEL has used exchange rate on the date of invoice instead of date of payment for conversion of 50% invoice payment.





35. The comparison of EPC Onshore cost, as claimed by IWEL, verified by auditors and as allowed by the Authority after review and verification of the above documents and as per precedent, is given below:

EPC Onshore	Claimed by IWEL		Verified by Auditors		Approved	
	USD	PKR	USD	PKR	USD	PKR
	(Million)					
	12.10	1,970.53	12.10	1,970.53	12.10	1,965.61

36. The difference of approximately PKR 4.93 million between the costs claimed by IWEL and allowed on account of the exchange rate variations.

EPC Contractor Claims:

37. IWEL has claimed USD 5.69 million (PKR 1,036.15 million) on account of EPC contractor claims in COD adjustment request. The Petitioner submitted that based on the overall delays on account of FME (i.e. Delay in construction works and delay in provision of Purchaser Interconnection Facilities), the additional costs are borne by the Company. The break-up of EPC contractor cost as claimed by IWEL as provided hereunder:

Description	USD Million	PKR Million
Additional cost claimed under equipment supply contract	0.47	84.86
Additional cost claimed under construction contract	3.77	687.23
Additional logistic cost claimed under FME	1.45	264.05
Total	5.69	1,036.15

38. In support of its claim, IWEL submitted detailed summary of each cost item in the COD adjustment request. The claimed costs are related to additional payment by EPC Contractor on account of international travelling, Original Equipment Manufacturers (OEM) personnel cost at site, exchange losses, anti-covid-19 cost, local hindrance cost, delay in approval of design & drawing, delay of EPA Tests by Employer, Idle cost resulted from strong wind, project catching-up activities, and Employer's additional requirements, etc. due to Covid-19 pandemic.

39. Upon scrutiny, it revealed that the claimed amount is not supported with copy of invoice, payment evidences such as bank statement, swift messages, cheque/pay order etc. It is pertinent to mention that the Audit report submitted by IWEL, has no information about EPC Contractor claim. IWEL submitted vide COD application that the claim for extension of time and cost submitted by the EPC Contractors will be paid/settled with the EPC Contractors at the time of final settlement to be achieved between the Company and EPC Contractors. Proof of payment or settlement with EPC Contractors on claims will be submitted to the Authority during the course of Authority's cost verification process. Further the Authority noted that the Auditor's Report has also not account for the EPC Contractor's claims.

40. The Authority observed that allowed EPC cost to IWEL was fixed in tariff determination with only exchange rate variation for the construction period on foreign portion. No upward revision of EPC cost was allowed in the reference generation tariff. The Authority further observed that there was no adjustment mechanism given on this account in reference generation tariff at the time of COD. Accordingly, the claim of IWEL being not in purview of COD adjustment has been declined.





41. Below is the comparison of total EPC cost claimed by IWEL and as allowed by the Authority is as under:

EPC	Claimed by IWEL		Approved	
	USD	PKR	USD	PKR
	(Million)			
Offshore	46.00	7,465.85	46.00	7,439.06
Onshore	12.10	1,970.53	12.10	1,965.61
Total	58.10	9,436.39	58.10	9,404.66

Adjustment of Duties and Taxes:

42. The Tariff Determination did not account for the impact of duties and taxes and provides the following with respect to the adjustment of this head:

"Duties and/or taxes, not being of refundable nature, relating to the construction period directly imposed on the Company up to COD will be allowed at actual upon production of verifiable documentary evidence to the satisfaction of the Authority."

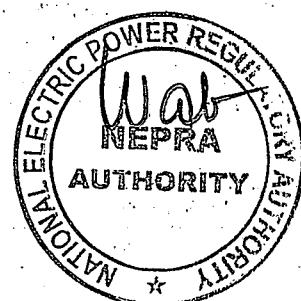
43. IWEL in its COD tariff application has requested for the duties and taxes of USD 0.58 million (PKR. 91.19 million). The breakup of the duties and taxes is given hereunder:

Description	Tariff Determination		Claimed at COD		Verified by Auditors	
	USD million	PKR million	USD million	PKR million	USD million	PKR million
SIDC	As per actual		0.58	91.19	0.58	91.19

44. The Audit Report provides that schedule of SIDC prepared by management was obtained by the Auditors. Then the amounts paid were matched with the details appearing therein with respect to respective Goods Declaration (GD) number, GD date, Bill of Lading (BL) number, BL date, invoice date, invoice amount (USD), commercial invoice, packing list, SIDC challan, pay order/customer's advice to excise & taxation (if any), invoice from clearing agent (if any) and bank statement where applicable and no difference was found. Two amounts were paid by the Contractors for which the Company is liable to pay them as they demand and the Company has already recorded Payable to account for that amount.

45. In support of its claim with respect to the Sindh Infrastructure Development Cess ("SIDC") payment, IWEL has submitted copies of Cess Challan, GD's, packing list, withdrawal request, bank statement and NBP Exchange Rate sheet. The comparison of duties and taxes, as claimed by IWEL, verified by Auditors and as being allowed by the Authority, after review and verification of the above documents, is given below:

Description	Claimed at COD		Verified by Auditors		Approved	
	USD	PKR	USD	PKR	USD	PKR
	(Million)					
Duties & Taxes	0.58	91.19	0.58	91.19	0.58	91.19





Project Development Cost:

46. The Authority in the Tariff Determination allowed USD 2.50 million in respect of the Project Development Cost ("PDC") to IWEL while stating the following mechanism for its adjustment at COD;

"PDC...shall be adjusted at actual at the time of COD considering the approved amount as the maximum limit. The amount allowed on this account in USD will be converted in PKR using the reference PKR/USD rate of 120 to calculate the maximum limit of the amount to be allowed at COD."

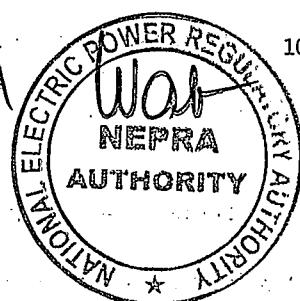
47. As per the above mechanism, the maximum amount allowed to IWEL under PDC head @PKR 120/USD works out to be about PKR 300.00 million.

48. The Petitioner in its COD adjustment request has claimed PDC of PKR 452.82 million (equivalent to about USD 2.96 million). The Petitioner submitted that due to higher exchange rate during the construction period, the Company filed Modification Petition for reconsideration of exchange rate of PKR 120/USD and requested to revise the exchange rate prevailing during the construction period. The Petitioner submitted that based on above tariff modification petition the Authority vide decision dated July 23, 2020 decided that *"18: the revision/adjustments of tariff on account of debt mix, repayment terms and exchange rate as requested by the Petitioner in the subject modification petition shall be made at the time of COD of the Project"*.

49. IWEL submitted that during construction and development phase it was required to engage some services where fees and costs were payable in foreign currency. However, the Authority in its determination stated that the amount allowed under PDC will be converted to PKR using the reference PKR/USD rate of 120 to calculate the maximum limit of the amount to be allowed at COD which restricts the Petitioner to recover the legitimate costs incurred under Project Development budget. IWEL further stated that the Authority in the past had allowed variation of PKR/USD exchange rate on PDC heads which are denominated in foreign currency. The Petitioner also provided the detailed breakup of the claimed cost.

50. The Auditor's Report provides that the Company incurred PDC amounting to PKR 452.81 million (USD 2.95 million). The Audit Report also provides that the schedules of costs prepared by the management were obtained and the amount paid were checked with the documents as mentioned under different heads:

- Salaries and Benefits: Copy of salary sheet, cheque, computerized payment receipt (CPR) and bank statement, where applicable.
- Technical Consultants: Copy of sales tax invoice, pay order to consultants, pay order to FBR, CPRs and bank statements, where applicable.
- Advisors Fee: Copy of commercial invoice, pay order to consultants, and bank statement and CPRs, where applicable.
- Fixed Assets-Land Lease: Copy of lease agreement, treasury challan and pay order.
- Government Authorities: Copy of invoice/challan and cheque/pay order, where applicable.
- Fixed Assets-Others: Copy of sale tax invoice and cheque, where applicable.
- Travelling & Vehicle Running Expenses: Copy of invoice/claim expense voucher, pay order/petty cash voucher, where applicable.
- Other Admin Costs: Copy of invoice/claim, expense voucher, and pay order/petty cash voucher, where applicable.





- CSR: Copy of invoice/claim expense voucher, and pay order/petty cash voucher, where applicable.
- The Auditor also stated that no difference was found.

51. It is pertinent to note here that the Petitioner's understanding regarding tariff modification decision dated July 23, 2020 (as referred above) relating to PDC is not correct since the cost allowed under PDC i.e. PKR 300 million was the maximum limit. Hence, no further adjustment in the rupee term was allowed by the Authority in the decision of July 23, 2020.

52. The claim submitted by IWEL has been analysed and the Authority noted that the Company had incurred the total PDC cost of PKR 452.818 million. The relevant documents as submitted by the Company in relation to the claim of the PDC have been checked. Considering the above details, the Authority has decided to allow the expenses on account of PDC to the limit of Tariff Determination, i.e. PKR 300 million in line with the reference determination. To convert the approved PKR amount in USD, the average exchange rate of PKR 163.21/USD has been taken into account. The said average exchange rate has been computed using three rates of each month, i.e. rate at the start, middle and end of that month as published by NBP on its website for the construction period of 15 months i.e. from October 1, 2020 till December 31, 2021. Accordingly, the corresponding USD amounts works out to be about USD 1.84 million, which is being allowed by the Authority.

Adjustment of Insurance during Construction

53. The Authority in the Tariff Determination allowed USD 0.29 million (maximum of 0.5% of the approved EPC cost for the project) for insurance during construction while stating the following mechanism for its adjustment at COD;

...Insurance during construction...shall be adjusted at actual, subject to allowed amount as maximum limit, at the time of COD on production of authentic documentary evidence to the satisfaction of the Authority. The amounts allowed on these accounts in USD will be converted in PKR using the reference PKR/USD rate of 120 to calculate the maximum limit of the amount to be allowed at COD."

54. As per the above mechanism, the maximum amount allowed to IWEL under captioned head @PKR 120/USD works out to be about PKR 34.80 million.

55. The Petitioner in its adjustment request has claimed insurance amount of PKR 51.80 million (equivalent to about USD 0.31 million). The outstanding payables were paid and the documentary evidence was submitted on July 14, 2023 through addendum to Tariff true-up adjustment application, wherein the total paid insurance during construction amount was revised to Rs.52.00 million (USD 0.31 million) due to exchange rate fluctuations, however, IWEL claims remain same i.e. 51.80 million.

56. IWEL submitted that owing to around 5 months (152 days) delay due to the FME, it had to extend its construction period insurance. IWEL informed that the insurance for 111 days out of 152 days was procured free-of-cost. however, due to the continuing impact of the FME, the further extension was charged by the insurer. Keeping in view the above, the Petitioner requested that the increase in insurance cost should be allowed.

57. As per the details submitted by IWEL the breakup of the claimed insurance during construction for the insured period is given hereunder:





Description	Adamjee Insurance Co. Ltd.	Premium net of Sales Tax	
		PKR	USD
		(Million)	
Marine Cargo & Marine Delay in start up	(01/07/2020 to 29/09/2021)	17.25	0.11
Erection / Construction All Risk		19.58	0.12
Erection Delay in Start-up		4.66	0.03
Third Party Liability – Erection		2.20	0.01
Terrorism Insurance		3.53	0.02
Total		47.22	0.29
Policy Extension Premium (after RCOD)			
Marine, DSU, Erection, All Risks (EAR) /EAR-DSU/Third Party Liability (Erection)	(12/02/2022 to 24/03/2022)	4.21	0.02
Terrorism & Political violence		0.57	0.002
Total		4.78	0.02
Grand Total		52.00	0.31

58. The Auditors in their Report has also verified the amount of PKR 51.80 million in respect of the insurance cost. The Audit Report provides that the schedule of costs prepared by management was obtained and the amount paid and the details appearing therein with respect to insurance policy date, insurance policy amount and payment date with copy of insurance policies, premium bill, premium paid receipts and bank statements, where applicable, were matched and no difference was found. Further it provides that for the amount payable the PKR/USD exchange rate as on the date of COD was used. The Audit report also corroborate that the payment was made against the Invoices issued.

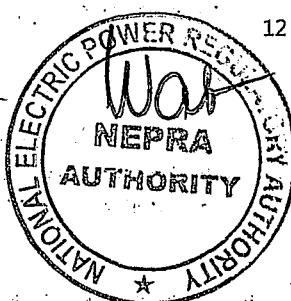
59. In support of its claim, IWEL has submitted copies of insurance policies, premium invoices, premium payment receipts, revised premium invoices for extended period, withdrawal requests, withholding sales tax CPR, NBP ER sheet and bank statements. The claim of the Petitioner has been checked and found that the claimed amount under insurance during construction is higher than the approved maximum limit.

60. Considering the above details and allowed in precedent case of MGEL, the Authority has decided to allow the expenses under the captioned head to the limit of Tariff Determination, i.e. PKR 34.80 million. The corresponding USD amount has been worked out on the basis of the average of the exchange rates prevailing on the respective payment date. The resultant amount works out to be about USD 0.22 million which is being allowed on account of insurance during construction cost.

Adjustment of Financing Fee and Charges

61. The Authority in the Tariff Determination had allowed financing fee and charges of USD 1.22 million. This cost was allowed at the rate of 2.50% of the allowed debt portion of the approved capital cost in the Tariff Determination. Following mechanism for the adjustment of financing fee and charges at the time of COD was prescribed;

....Financing Fee and charges shall be adjusted at actual at the time of COD considering the approved amount as the maximum limit. The amounts allowed on these accounts in USD will be converted in PKR using the reference PKR/USD rate of 120 to calculate the maximum limit of the amount to be allowed at COD."





62. As per the above mechanism, the maximum amount allowed to IWEL under this head @ PKR 120/USD works out to be about PKR 146.16 million. The Petitioner in its COD adjustment request application has claimed financing fee and charges amounting to PKR 282.35 million. In terms of USD, the claimed amount is USD 1.72 million.
63. Below is the breakup of financing fee and charges as claimed by the Petitioner and as verified by the Auditors:

Description	Claim		Audited	
	USD	PKR	USD	PKR
	(in Million)			
Local Financing fee	0.49	81.99		
Foreign Financing fee	0.61	97.35	1.72	282.35
Advisors	0.62	103.00		
Total	1.72	282.35	1.72	282.35

64. IWEL submitted that the decision to allow financing fee and charges at the reference exchange rate of PKR 120 was based on the assumption of 100% local SBP financing. As submitted in the Tariff Modification Petition, the SBP financing was available up to maximum of 50% of the total debt requirements, therefore, IWEL arranged the balance amount in form of foreign financing through British International Investments (BII). Accordingly, the fees and costs under foreign financing were directly linked to exchange rate fluctuations. IWEL submitted that the unprecedented devaluation of PKR has a direct impact on project cost and increase in required financing, therefore, restricting financing fee and charges at maximum of applying reference exchange rate of PKR 120 on USD values is not justified. IWEL further stated that the increase in Financing Fee and Charges from allowed limit of USD 1.22 million to actual incurred USD 1.72 million is due to extended construction period and the increase should therefore be allowed.
65. The Audit Report provides that for financing fee and charges, schedule of costs prepared by management were obtained and match the amount paid/payable and the details appearing therein with respect to invoice amount, invoice date, instrument number and payment date with copy of invoices, foreign outward remittance debit advice, swift acknowledgement, cheque/pay order, FBR CPR and bank statement, where applicable and no difference was found.
66. IWEL in support of its claim has submitted copies of financing agreements and Lender's Legal and Technical Contracts/agreement, Invoices, payment instructions, bank statements, relevant exchange rate sheet etc. which have been checked. It was noted that although the Authority vide the modification decision issued on July 23, 2020 recognized that the foreign financing be also obtained by IWEL. However, the term of adjustment of financing fee and charges was not modified.
67. Considering the decision for not allowing additional cost related to extended period, the Authority has decided to allow the expenses under the captioned head to the limit of Tariff Determination, i.e. PKR 146.16 million. The corresponding USD amount has been worked out on the basis of the average of the exchange rates prevailing on the respective payment dates. The resultant amount works out to be about USD 0.90 million which is being allowed.





Adjustment of Debt Amount and Interest during Construction:

68. The Tariff Determination was issued on debt-to-equity ratio of 80:20, while stating that the tariff shall be adjusted on actual debt to equity mix at the time of COD, subject to equity share of not more than 20%. In the COD tariff adjustment application, IWEL has submitted that the total project cost (excluding EPC Contractors claim of USD 5.687 million) has been financed by the Company as per the following details:

Description	PKR Million	USD Million
Debt	8,460.07	52.54
Equity	2,260.31	13.80
Total	10,720.38	66.34

69. The Tariff Determination of IWEL was approved on the basis of 100% SBP concessionary debt refinancing scheme for renewable energy projects issued on June 02, 2016 ("SBP Scheme 2016") with the following provision:

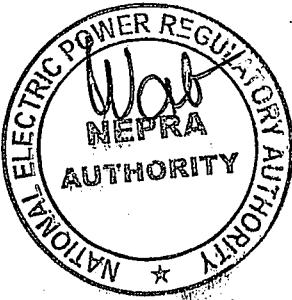
"In case the Petitioner is not able to secure financing under SBP scheme then the tariff of IWEL shall be adjusted on conventional local/foreign financing, or a mix of both, at the time of its COD. However, the Petitioner shall have to prove through documentary evidence issued by SBP/commercial bank that it exhausted the option of availing 100% financing under SBP scheme before availing part/full of conventional local/foreign loan. "

70. The aforesaid refinancing scheme was revised by SBP on July 26, 2019 ("SBP Scheme 2019") and allowed renewable energy projects, having capacity of more than 20 MW, to obtain up to 50% of financing (debt) under the said Scheme. Since the Project is of more than 20 MW capacity, therefore, the Petitioner filed Tariff Modification Petition dated September 18, 2019 requesting the Authority to base tariff on a mix of foreign and local financing, on the pretext that not more than 50% financing can be obtained under SBP Scheme, 2019. The decision of the Authority on the Modification Petition was issued on July 23, 2020 whereby the Authority held that the adjustment of tariff on mix of local and foreign financing shall be made at the time of tariff adjustment at COD of the Project.

71. IWEL submitted that in view of the SBP Scheme 2019 as stated above, the Company was only able to secure concessionary finance under the Revised SBP Scheme for the maximum of fifty percent (50%) of its debt requirement. Accordingly, IWEL had to arrange the balance debt financing in foreign currency from British International Investments ("BII") (Formerly CDC Group PLC). Stating that IWEL requested the Authority to adjust the tariff determination and tariff table to reflect the 50:50 financing mix of local and foreign financing, instead of hundred percent (100%) SBP Scheme local financing.

72. On the review of the latest financing documents as submitted by the Petitioner, it was noted that following debt commitments were secured by the IWEL:

Source of Funds	Financiers	Debt Commitment
SBP RE Scheme debt	<ul style="list-style-type: none"> • Habib Bank Limited (50.32%) • Askari Bank Limited (28.18%) • Pakistan Kuwait Investment Company (Pvt.) Limited (12.08%) 	PKR 4,968.00 million





	<ul style="list-style-type: none"> Soneri Bank Limited (9.42%) 	
Commercial Foreign debt (LIBOR)	<ul style="list-style-type: none"> British International Investment (formerly CDC Group Plc) 	USD 27.60 million

73. The amount of debt as claimed by IWEL and verified by the Auditors is provided as under;

Source of Debt	Claimed by IWEL		Verified by Auditors	
	Amount in USD (Million)	Amount in PKR (Million)	Amount in USD (Million)	Amount in PKR (Million)
SBP RE Scheme debt	26.54	4,157.26	26.54	4,157.25
Foreign debt (LIBOR)	26.00	4,302.82	26.00	4,290.796
Total	52.54	8,460.07	52.54	8,448.051

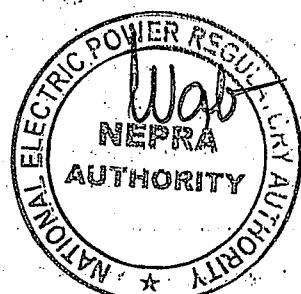
74. It is noted that the SBP loan has been secured by the Company for 10 years repayment period at the cost of 4.75% (5.25% inclusive of savings) to be paid on quarterly basis having equal principal instalments. The foreign loan has been obtained by the Company for 13 years repayment period at the cost of LIBOR + 4.25% to be paid on quarterly basis having certain fixed percentage of principal repayments.

75. The Audit Report provides that Schedule of debt drawdown prepared by management were obtained and match the amount received and the details appearing therein with respect to receipt date and amount, with copy of bank statements, swift messages for loan receipt (for foreign loan), and SBP Rate Sheet, where applicable and no difference was found.

76. IWEL has submitted copies of financing agreements, copies of bank statements in which debt drawdown were credited, NBP rate sheets and audited accounts for the construction period. The submission of IWEL have been checked with the source documents. For calculating the debt mix, the foreign currency loan was converted to PKR using the PKR/USD exchange rate prevailing on the date of disbursement and for local currency loan was converted to USD using the PKR/USD exchange rate prevailing on the date of disbursement. The final position and terms of different loans, as obtained by IWEL and approved is provided below:

Source of Debt	Amount in USD (Million)	Amount in PKR	% of Debt in USD Term	Terms	Repayment
SBP RE Scheme debt	26.53	4,157.26	50.51%	• Rate before Refinancing is KIBOR + 1.75% • SBP Refinancing Rate is 4.75%+0.50% saving	10 years
Foreign debt (LIBOR)	26.00	4,302.82	49.49%	3-Month LIBOR + 4.25%	13 years
Total	52.53	8,460.07	100%		

77. In the Tariff Determination, the IDC of USD 1.97 million (PKR 235.92 million) was allowed. The said amount of IDC was computed on the basis of 100% SBP refinancing scheme at 6% interest rate using certain percentage of drawdowns for the construction period of 15 months. The Tariff Determination provides the following mechanism with respect to adjustment of IDC at the time of COD:





"IDC will be recomputed at COD on the basis of actual timing of debt drawdowns (for the overall debt allowed by the Authority at COD) for the project construction period of fifteen months allowed by the Authority."

"The reference tariff has been worked out on the basis of cost of 6% offered under SBP financing scheme. In case cost negotiated by the Company under SBP scheme is less than the said limit of 6%, the savings in that cost shall be shared between the power purchaser and the power producer in the ratio of 60:40 respectively."

"In case the Company shall secure full or part of local conventional loan then the tariff of Company shall be adjusted at the time of COD at applicable KIBOR + spread of 2.25%. The savings in the approved spreads during the loan tenor shall be shared between the power purchaser and power producer in the ratio of 60:40. The tenor of the debt servicing shall not be less than thirteen years for this loan."

"In case the Company shall secure full or part of foreign conventional loan then the tariff of Company shall be adjusted at the time of COD at applicable LIBOR + spread of 4.25%. The savings in the approved spreads during the loan tenor shall be shared between the power purchaser and power producer in the ratio of 60:40. The tenor of the debt servicing shall not be less than thirteen years for this loan."

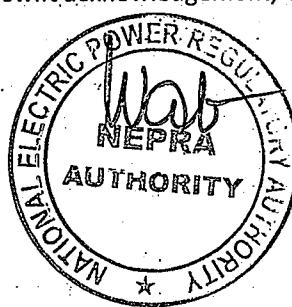
"In case the Company shall secure foreign loan under any credit insurance (Sinosure etc.) then the cost of that insurance shall be allowed to the maximum limit of 0.6% of the yearly outstanding principal and interest amounts. For that purpose, the spread over that full/part of loan shall be considered as 3.5% as the maximum limit. The savings in the spread during the loan tenor shall be shared between the power purchaser and power producer in the ratio of 60:40."

78. IWEL in its COD-tariff application has requested for IDC based on actual debt drawdown for the actual construction period of more than 20 months. Below are the details of IDC as claimed by IWEL and as verified by Auditors:

Description	Claimed by IWEL		Verified by Auditors (PKR in million)
	(USD in million)	(PKR in million)	
SBP RE scheme	1.41	241.79	
Commercial Foreign Loan	0.73	128.26	343.29
Less: Interest Income	(0.17)	(26.76)	
Net Interest During Construction	1.97	343.29	343.29

79. The Audit report provides that schedule of costs prepared by management were obtained and the amount paid and the details appearing therein were matched with respect to amount, payment date and interest rate with copy of invoice, bank statement and SBP's KIBOR rate sheet, LIBOR historical rate report, swift acknowledgement, bank debit advice, LIBOR rate where applicable and financing agreements and no difference was found. For the payable amount, we obtained schedule of costs, prepared by management, and matched the amount with the invoice issued by the Lender by pro-rating till the date of COD and converted into Pakistan Rupee by using Exchange rate as on the date of COD. The report further provide that accruals have been verified through mathematical accuracy.

80. IWEL in support of the claim has submitted copies of financing agreement, interest payment invoices, bank statement, exchange rate sheets, KIBOR rate sheet and swift acknowledgement, bank

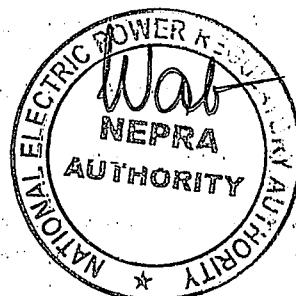




debit advice, LIBOR rates, where applicable which have been checked. In addition, as per the sharing mechanism provided in the tariff determination the calculation of saving in SBP loan as a result of sharing of spread in a ratio of 60:40 (Purchaser: Producer) has also been checked. Based on the documentary evidence submitted by the Company, the interest payments made by the Company as verified on account of local and foreign debt for the construction period from October 1, 2020 till December 31, 2021 excluding OFME period of 237 days i.e. from February 06, 2020 till September 30, 2020 works out hereunder:

IDC	Total Drawdowns	Interest Rate	Interest Amount	
	PKR in million	%	PKR in million	Equiv. USD in million
SBP RE scheme	4,157.25	* Rate before refinancing is KIBOR + 1.75%. * SBP Refinancing rate is 4.75%+0.5% saving.	183.04	1.09
Foreign Loan	USD in million			
Commercial Foreign loan	26.00	* LIBOR+4.25%	81.97	0.48
	Total Interest payment		265.00	1.57

81. The interest amount of PKR 183.04 million in respect of SBP loan includes interest amount of PKR 33.37 million paid at KIBOR + 1.75% till the time before loan was refinanced by the SBP excluding the OFME period as mentioned above. After which the interest has been paid at the refinance rate of 5.25%.
82. The amount of PKR has been converted in USD using the rate prevailing on the date of the interest payment, as obtained from NBP's website. Likewise, the amount of interest paid in USD has been converted in PKR using the above said mechanism.
83. The Authority has already decided to allow the construction period of 15 months restricted upto December 31, 2021. Accordingly, the amount of IDC to be allowed to the Petitioner has also been calculated from October 1, 2020 till December 31, 2021 excluding OFME period of 237 days and beyond revised RCOD period, which has been computed using the following steps:
 - a. The amount of IDC calculated based on actual drawdowns has been added in the capital cost+ financing fee as allowed in this decision to arrive at the verified project cost.
 - b. The amount of verified project cost was then segregated between debt and equity in the ratio of 80:20 as was approved in the Tariff Determination.
 - c. The verified debt amount was then sub-divided into actual percentages i.e., SBP loan (50.51%) and foreign loan (49.49%).
 - d. The percentage of respective loans amount as actually disbursed till revised RCOD (December 31, 2021) was applied on the verified debt amount.
 - e. The IDC was then recomputed on that portion of debt amount disbursed till revised RCOD.
 - f. The method and drawdown schedule as was used for the calculation of verified IDC has been applied for the calculation of allowed IDC.
84. Accordingly, the amount of allowed IDC, following at the above steps, worked out as under:





Description	IDC	
	USD (Million)	PKR (Million)
SBP RE scheme	1.09	182.74
Commercial Foreign loan	0.46	78.66
Total	1.54	261.40

Adjustment of Interest Income

85. The Petitioner has claimed that it has earned an interest income to the tune of PKR 26.76 million against debt and equity injections. The said amount of the interest income has also been verified by the Auditors. The Audit report provide that the schedule of interest income prepared by management was obtained and the amount received and the details appearing therein with respect to receipt date and exchange rate with copy of bank statements and SBP exchange rate sheet were matched and no difference was found.

86. Given the fact that interest cost to the limit of revised RCOD (December 31, 2021) excluding the OFME period has been allowed, therefore, the impact of interest income has also been limited to revised RCOD excluding the OFME period, i.e. PKR 24.69 million.

Loan	Approved IDC	
	USD in million	PKR in million
SBP RE scheme	1.09	182.74
Commercial Foreign loan	0.46	78.66
Less: Interest Income	(0.16)	(24.69)
Total	1.39	236.72

Summary of the Project cost

87. Recapitulating above, the project cost determined in the Tariff Determination, claimed in the tariff adjustment application, verified in the Audit Report and being allowed by the Authority is provided as under:

Description	Determined		Claimed		Auditors		Allowed	
	USD	PKR	USD	PKR	USD	PKR	USD	PKR
							(Million)	
Total EPC Cost	58.10	6,971.76	58.10	9,436.39	58.10	9,436.39	58.10	9,404.66
EPC Contractors claims			5.69	1,036.15				
Duties and Taxes			0.58	91.19	0.58	91.19	0.58	91.19
Project Development Cost	2.50	300.00	2.96	452.82	2.96	452.82	1.84	300.00
Insurance during construction	0.29	34.80	0.31	51.80	0.31	51.80	0.22	34.80
Financing Fee and Charges	1.22	146.16	1.72	282.35	1.72	282.35	0.90	146.16
Interest during Construction	1.97	235.92	2.14	370.06	2.14	370.06	1.54	261.40
Interest Income			(0.17)	(26.76)	(0.17)	(26.76)	(0.16)	(24.69)
Total Capital Cost	64.07	7,688.64	71.33	11,693.98	65.64	10,657.84	63.02	10,213.53





88. Based on the above project cost, following table shows the amount of different debts which have been used to compute the debt servicing component of the tariff works out as under:

Loans	USD	PKR
	(Million)	
SBP loan	25.46	4,126.96
Commercial foreign loan	24.95	4,043.87
Total	50.42	8,170.82

Adjustment of Equity Amount, Return on Equity ("ROE") and Return on Equity during Construction ("ROEDC"):

89. The Petitioner in its request submitted that equity amounting to PKR 2,260.31 million have been injected by Indus Dying & Manufacturing Co Limited, which has been certified by the Auditor.

90. All the injected equity amount were deposited in Habib Bank Ltd. PKR account except for equity injected before construction start-date amounting to PKR. 460 million no evidence of equity credited to the bank accounts has been submitted by the Petitioner. However, the same can be verified through SECP form 3: For the purpose of verification, equity claim has been verified from the audited accounts for the financial year ending June 2022. The equity in term of equivalent USD amount comes out to be 13.61 million. IWEI in support of equity injections has submitted copies of copies of bank statements in which equity was injected, Auditor's Certificate on Capital Invested, SECP form 3, exchange rate sheets and audited accounts.

91. The Audit Report provides that the schedule of equity contribution by the Company shareholders prepared by management were obtained and matched the amount received and the details appearing therein with respect to shares and their amount, with copy of share certificate, return of allotments of shares (SECP - Form 3), bank statement, and SBP Rate Sheet, where applicable and no difference was found.

92. Based on the review and verification of the above documents, the ratio of equity contribution comes out to be higher than what was prescribed in the Tariff Determination therefore, the Authority has decided to consider the equity contribution more than 20% as being financed by debt, in accordance with the Tariff Determination: Based on the approved project cost, the amount of equity works out as under:

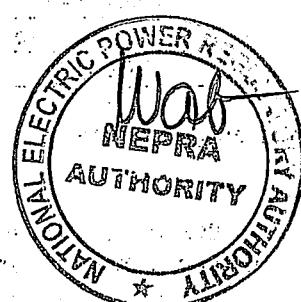
Equity Share	USD Terms	PKR Terms
	(Million)	
	12.60	2,042.71

93. The ROEDC component of PKR 0.1166/kwh was approved in the Tariff Determination, while stating the following mechanism for its adjustment:

94. "ROEDC will be adjusted at COD on the basis of actual equity injections (within the overall equity allowed by the Authority at COD) for the project construction period of fifteen months allowed by the Authority."

94. It is noted that about 100% of the equity amount had been disbursed till COD. Therefore, the amount of ROEDC to be allowed has been computed while proportionating the same on the approved equity

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amount over the actual equity amount. The detailed computations are explained in the following table:

Computation of ROEDC	USD Million
A. Actual Equity Injection	13.61
B. Percentage of Actual Injections over Total	100%
C. Total Approved Equity Amount	12.60
D. Amount Drawn (C*B)	12.60
E. ROEDC Verified	2.42
F. ROEDC Assessed (E/A*D)	2.24

95. Using the PMT formula, the ROEDC component works out to be PKR. 0.3282/kWh (using exchange rate of PKR 177.95/USD as on 31st December, 2021). The amount of annual ROE, using rate of 14%, at approved equity amount of USD 12.60 million comes out as USD 1.66 million. Accordingly, the ROE component works out to be PKR 1.7754/kWh (using exchange rate of PKR 177.95/USD as on 31st December, 2021).
96. It is important to mention here that the equity IRR of 14% per annum was allowed to IWEL and the calculations in the Tariff Determination were made assuming the payment is to be made on annual basis, whereas the payment of ROE is to be paid on monthly basis as per EPA. Therefore, the Authority has decided to approve IRR while using the monthly payment of return components as has also been allowed in the recent similar COD case of MGEL and LRPL.

Operation and Maintenance (O&M) Cost

97. The Authority in the tariff determination allowed O&M cost of USD 23,000 per MW per annum for IWEL. The allowed O&M had been approved in the ratio of 50:50 in local and foreign components. Detail is as under:

O&M	Cost allowed	Tariff	Component	Indexation
Local O&M	\$23,000/MW/year	0.4146	50%	CPI (General)
Foreign O&M		0.4146	50%	US-CPI and PKR/USD ER

98. Further, the Authority vide review motion decision dated May 17, 2021 decided as under:

"The O&M cost, its mix, and the corresponding mechanism thereof as approved in the Tariff Determination of Indus Wind Energy Limited shall be applicable for the period during which the Petitioner has already finalized the WP and LT O&M Agreements, i.e. 13 years. During this time, however, the Petitioner shall be required to submit, on an annual basis, the documentary evidence/report pertaining to actual expenditures on account of O&M. The savings, if any, in the actual O&M cost compared to the approved O&M cost shall completely be passed on to the consumers.

Subsequent to the lapse of the LT O&M Contract, in order to claim O&M costs, the Petitioner shall be required to carry out competitive bidding for the selection of the O&M contractor in accordance with NEPRA's applicable law. Based on this competitive bidding process, the Authority shall make revisions in the O&M cost, while capping the prevailing level of the approved O&M cost. 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.)."



99. The Petitioner in its COD adjustment request has claimed local O&M of PKR 0.5830/kWh and foreign O&M of PKR 0.6960/kWh for tariff control period. The tariff being approved in this decision is to be applicable for the energy supplied by the Company during the quarter January-March, 2022, therefore, the O&M Cost being allowed in this decision has been adjusted/indexed, as per the prescribed mechanism, on the indices applicable for the said quarter which is detailed as under:

O&M Cost	Determined	Claimed	Approved
	PKR/kWh		
Local O&M	0.4146	0.5830	0.5856
Foreign O&M	0.4146	0.6960	0.6777
Indexation values:			
NCPI (General)	229.27	157.46	158.18
PKR/USD exchange rate	120	182.20	177.95
US-CPI	252.146	278.802	277.948

- For the purpose of calculation of approved numbers; N-CPI and US-CPI for month of November, 2021 has been used. The exchange rate of December 31, 2021 has been used.
- Due to discontinuation of CPI, the Authority vide decision dated March 10, 2021 (notified in the official Gazette) has replaced the same with NCPI. The reference generation tariff was determined on CPI. Accordingly, CPI of August 2018 i.e. 229.27 was revised with the equivalent NCPI of May 2020 i.e. 131.01. Subsequently the same was indexed with NCPI of November 2021.

Insurance during Operation

100. The tariff determination provides following provision with regard to insurance during operations at COD:

"The actual insurance cost for the minimum cover required under contractual obligations with the power purchaser, not exceeding 0.4% of the approved EPC cost, will be treated as pass through. Insurance component of reference tariff shall be adjusted annually as per actual upon production of authentic documentary evidence..."

101. IWEL has not submitted complete documentary evidence of operational insurance. It is noted that in the Tariff Determination, reference insurance component has been calculated considering 0.4% of the allowed EPC cost (USD 58.10 million) which works out USD 0.23 million. Based on the same mechanism, the insurance component has been adjusted/revised at COD and is being allowed as PKR 0.2485/kWh. The adjustment mechanism of operational insurance is given in order part of this decision.

ORDER

In pursuance of section 7(3)(a) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 read with Rule 3 of NEPRA (Tariff Standards & Procedure) Rules, 1998, the Authority hereby approves the following generation tariff along with terms and conditions for Indus Wind Energy Limited for its 50 MW wind power project for delivery of electricity to the power purchaser:

- Levelized tariff works out to be Rs. 7.9244/kWh (US.Cents 4.4531/kWh).
- Net Annual Plant Capacity Factor of 38% has been approved.
- The aforementioned tariff is applicable for twenty-five (25) years from COD.





- Debt to Equity ratio of 80:20 has been approved.
- Debt Repayment period of 10 years has been taken into account for local financing under SBP Scheme.
- Debt Repayment period of 13 years (51 Quarters) has been taken into account for foreign financing.
- The cost of financing of debt of 5.25% (inclusive of saving) for SBP loan and LIBOR+4.25% for foreign loan, both for construction and operation period has been considered.
- Return on Equity during construction and operation of 14% on monthly payment basis has been allowed.
- Construction period of 15 months has been used for the workings of ROEDC and IDC from October 01, 2020 till revised RCOD of December 31, 2021 (excluding OFME period).
- Insurance during operation has been calculated at 0.4% of the allowed EPC cost.
- Reference Exchange Rates of 177.95 PKR/USD of December 31, 2021 has been used.
- Detailed component wise tariff is attached as **Annex-I** of this decision.
- Debt Servicing Schedule for SBP financing is attached as **Annex-II** of this decision.
- Debt Servicing Schedule for foreign financing is attached as **Annex-III** of this decision.

A. Indexation

Adjustment of O&M, return on equity, return on equity during construction shall be made on quarterly basis for the quarters starting from 1st January, 1st April, 1st July and 1st October, based on latest available information. Adjustment of debt servicing components, where applicable, shall also be made on quarterly basis. Insurance component shall be adjusted on annual basis. The indexation for the 1st quarter i.e. January-March 2022 except for insurance component has already been made in this decision. The indexation mechanisms for subsequent quarters are given hereunder:

i) Operation and Maintenance Costs

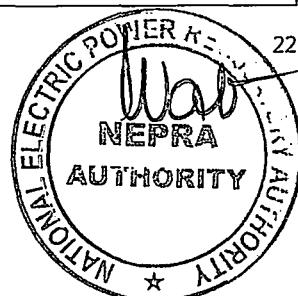
O&M components of tariff shall be adjusted based on revised rates of local Inflation (N-CPI) as notified by Pakistan Bureau of Statistics, foreign inflation (US CPI) as notified by US Bureau of Labour Statistics and TT&OD selling rate of US Dollar as notified by National Bank of Pakistan according to the following formula:

F. O&M _(REV)	=	F. O&M _(REF) * US CPI _(REV) / US CPI _(REF) * ER _(REV) / ER _(REF)
L. O&M _(REV)	=	L. O&M _(REF) * N-CPI _(REV) / N-CPI _(REF)

Where;

F. O&M _(REV)	=	The revised O&M Foreign Component of Tariff
L. O&M _(REV)	=	The revised O&M Local Component of Tariff
F. O&M _(REF)	=	The reference O&M Foreign Component of Tariff
L. O&M _(REF)	=	The reference O&M Local Component of Tariff
US CPI _(REV)	=	The revised US CPI (All Urban Consumers) of the middle month of preceding quarter as notified by US Bureau of Labor Statistics

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US CPI _(REF)	=	The reference US CPI (All Urban Consumers) of 277.948 of November, 2021
N-CPI _(REV)	=	The revised N-CPI of the middle month of preceding quarter as notified by Pakistan Bureau of Statistics
N-CPI _(REF)	=	The reference N-CPI of 158.18 for the month of November, 2021
ER _(REV)	=	The revised TT & OD selling rate of US dollar as notified by the National Bank of Pakistan as at the last day of the preceding quarter.
ER _(REF)	=	The reference TT & OD selling rate of PKR 177.95/USD of December 31, 2021.

ii) Insurance during Operation

The actual insurance cost for the minimum cover required under contractual obligations with the Power Purchaser, not exceeding 0.4% of the approved EPC cost, will be treated as pass through. Insurance component of reference tariff shall be adjusted annually as per actual upon production of authentic documentary evidence to the satisfaction of the Authority according to the following formula:

AIC	=	Ins _(Ref) / P _(Ref) * P _(Act)
Where;		
AIC	=	Adjusted insurance component of tariff
Ins _(Ref)	=	Reference insurance component of tariff
P _(Ref)	=	Reference premium @ 0.4% of approved EPC Cost (USD 58.100 million) at PKR 177.95/USD of December 31, 2021.
P _(Act)	=	Actual premium or 0.4% of the EPC Cost converted into PKR on exchange rate prevailing at the time of insurance premium payment of the insurance coverage period, whichever is lower.

iii) Return on Equity

The total ROE (ROE + ROEDC) component of the tariff will be adjusted annually on account of change in PKR/USD parity. The variation relating to these components shall be worked out according to the following formula:

ROE _(Rev)	=	ROE _(Ref) * ER _(Rev) / ER _(Ref)
Where;		
ROE _(Rev)	=	Revised ROE Component of Tariff
ROE _(Ref)	=	Reference ROE Component of Tariff
ER _(Rev)	=	The revised TT & OD selling rate of US dollar as notified by the National Bank of Pakistan as at the last day of the preceding quarter
ER _(Ref)	=	The reference TT & OD selling rate of Rs. 177.95/USD of December 31, 2021

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iv) **Indexations applicable to debt**

The principal component of foreign debt will be adjusted on quarterly basis, on account of revised TT & OD selling rate of US Dollar, as notified by the National Bank of Pakistan as at the last day of the preceding period, over the applicable reference exchange rate. The interest part of tariff component for the foreign loan shall also be adjusted with respect to change in applicable LIBOR according to the following formula:

ΔI	=	$P_{(REV)} * (LIBOR_{(REV)} - 0.20913\%) / 4$
Where:		
ΔI	=	The variation in interest charges applicable corresponding to variation in 3-month LIBOR. ΔI can be positive or negative depending upon whether 3-month LIBOR $_{(REV)}$ per annum $>$ or $<$ 0.20913%. The interest payment obligation will be enhanced or reduced to the extent of ΔI for each quarter under adjustment.
$P_{(REV)}$	=	The outstanding principal (as indicated in the attached debt service schedule to this order at Annex-III), on a quarterly basis at the relevant calculations date.
$LIBOR_{(REV)}$	=	Revised 3-month LIBOR as at the last day of the preceding quarter.

Note: The revised LIBOR shall be replaced with SOFR with effect from July 01, 2023 in light of the decision of the Authority regarding Suo moto proceedings for transition from LIBOR to SOFR dated December 5, 2024 and December 13, 2024. The Company shall submit the indexation of the debt service component (foreign) in light of the aforesaid decision.

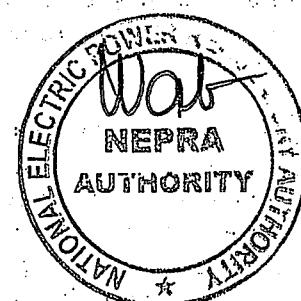
The foreign interest component will also be adjusted on quarterly basis, on account of revised TT & OD selling rate of US Dollar, as notified by the National Bank of Pakistan as at the last day of the preceding quarter, over the applicable reference exchange rate.

B. Terms and Conditions

The following terms and conditions shall apply to the determined tariff:

- The O&M Cost, its mix, and the corresponding mechanism thereof as approved shall be applicable for 13 years from COD. During this time, however, the Petitioner shall be required to submit, on an annual basis, the documentary evidence/report pertaining to actual expenditures on account of O&M. The savings, if any, in the actual O&M cost compared to the approved O&M cost shall completely be passed on to the consumers.
- Subsequent to the lapse of the LT O&M Contract, in order to claim O&M costs, the Petitioner shall be required to carry out competitive bidding for the selection of the O&M contractor in accordance with NEPRA's applicable law. Based on this competitive bidding process, the Authority shall make revisions in the O&M cost, while capping the prevailing level of the approved O&M cost. 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.).
- This tariff will be limited to the extent of net annual energy generation supplied to the power purchaser up to 38% net annual plant capacity factor. Net annual energy generation supplied to

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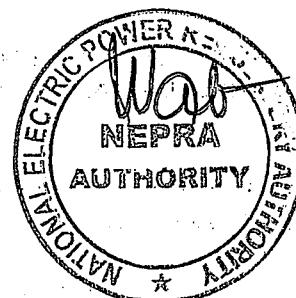


the power purchaser in a year, in excess of 38% net annual plant capacity factor will be charged at the following tariffs:

<u>Net annual plant capacity factor</u>	<u>% of prevalent tariff allowed to power producer</u>
Above 38% up to 40%	5%
Above 40% up to 42%	10%
Above 42% up to 44%	20%
Above 44% up to 46%	40%
Above 46% up to 48%	80%
Above 48%	100%

- The risk of wind resource shall be borne by the power producer.
- The Company is required to maintain the availability levels as declared in the Tariff Petition and the studies provided therein. Power purchaser shall conduct detailed monitoring/audit of the operational record/log of all the wind turbines to verify output/capacity of the power plant so that the power producer cannot intentionally suppress the capacity factor.
- In the tabulated above-mentioned tariff, no adjustment for certified emission reductions has been accounted for. However, upon actual realization of carbon credits, the same shall be distributed between the power purchaser and the power producer in accordance with the applicable GOP Policy, amended from time to time.
- The savings in the cost of any financing during any time of debt servicing period shall be shared between the power purchaser and the Company in the ratio of 60:40.
- In case the Company is obligated to pay any tax on its income from generation of electricity, or any duties and/or taxes, not being of refundable nature, are imposed on the Company, the exact amount paid by the Company on these accounts shall be reimbursed on production of original receipts. This payment shall be considered as a pass-through payment. However, withholding tax on dividend shall not be a pass-through item.
- No provision for the payment of Workers Welfare Fund and Workers Profit Participation has been made in the tariff. In case, the Company has to pay any such fund, that will be treated as pass through item in the EPA.

- The indexation already allowed on interim basis shall not be applicable after the notification of this decision. Subsequent to notification, the indexations/adjustment shall be made in line with the COD true-up decision.



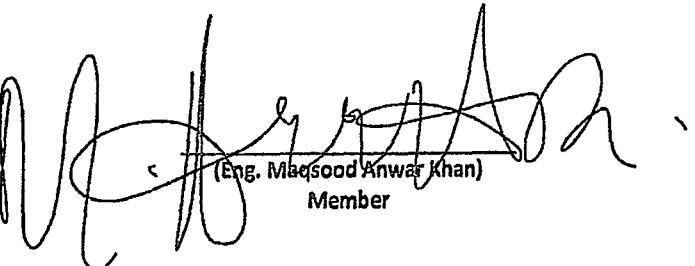


- The above assessment has been carried out based on the data/information provided by the Petitioner, which the Authority believes is correct and based on facts. In case of any deviation / misrepresentation observed at a later stage, the Petitioner shall be held responsible for the consequences arising out, under NEPRA Act, Rules and Regulations made thereunder. Any consequential adjustment if required will be made accordingly.

103. The instant decision along with attached three Annexures, is Intimated to the Federal Government for notification in the official Gazette as per Section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (XL of 1997).

AUTHORITY


(Amina Ahmed)
Member


(Eng. Maqsood Anwar Khan)
Member

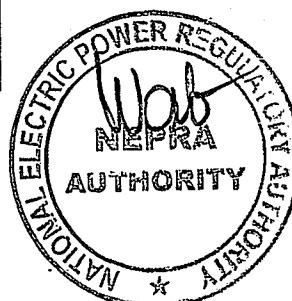

(Waseem Mukhtar)
Chairman



Indus Wind Energy Limited

Tariff Table Rs./kWh

Year	O&M - Local	O&M - Foreign	Insurance	ROE	ROEDC	Foreign Loan - Principal	Foreign Loan - Interest	SBP Loan - Principal	SBP Loan - Interest	Total
1	0.5856	0.6777	0.2485	1.7754	0.3282	1.4139	1.1658	2.4795	1.2529	9.9276
2	0.5856	0.6777	0.2485	1.7754	0.3282	1.4766	1.1022	2.4795	1.1228	9.7964
3	0.5856	0.6777	0.2485	1.7754	0.3282	1.5742	1.0347	2.4795	0.9926	9.6965
4	0.5856	0.6777	0.2485	1.7754	0.3282	1.6772	0.9628	2.4795	0.8624	9.5974
5	0.5856	0.6777	0.2485	1.7754	0.3282	1.7869	0.8862	2.4795	0.7322	9.5002
6	0.5856	0.6777	0.2485	1.7754	0.3282	1.9029	0.8046	2.4795	0.6021	9.4045
7	0.5856	0.6777	0.2485	1.7754	0.3282	2.0275	0.7177	2.4795	0.4719	9.3120
8	0.5856	0.6777	0.2485	1.7754	0.3282	2.1596	0.6251	2.4795	0.3417	9.2213
9	0.5856	0.6777	0.2485	1.7754	0.3282	2.3007	0.5265	2.4795	0.2115	9.1336
10	0.5856	0.6777	0.2485	1.7754	0.3282	2.4522	0.4214	2.4795	0.0814	9.0499
11	0.5856	0.6777	0.2485	1.7754	0.3282	2.6107	0.3094	-	-	6.5354
12	0.5856	0.6777	0.2485	1.7754	0.3282	2.7811	0.1902	-	-	6.5867
13	0.5856	0.6777	0.2485	1.7754	0.3282	2.5141	0.0598	-	-	6.1892
14	0.5856	0.6777	0.2485	1.7754	0.3282	-	-	-	-	3.6153
15	0.5856	0.6777	0.2485	1.7754	0.3282	-	-	-	-	3.6153
16	0.5856	0.6777	0.2485	1.7754	0.3282	-	-	-	-	3.6153
17	0.5856	0.6777	0.2485	1.7754	0.3282	-	-	-	-	3.6153
18	0.5856	0.6777	0.2485	1.7754	0.3282	-	-	-	-	3.6153
19	0.5856	0.6777	0.2485	1.7754	0.3282	-	-	-	-	3.6153
20	0.5856	0.6777	0.2485	1.7754	0.3282	-	-	-	-	3.6153
21	0.5856	0.6777	0.2485	1.7754	0.3282	-	-	-	-	3.6153
22	0.5856	0.6777	0.2485	1.7754	0.3282	-	-	-	-	3.6153
23	0.5856	0.6777	0.2485	1.7754	0.3282	-	-	-	-	3.6153
24	0.5856	0.6777	0.2485	1.7754	0.3282	-	-	-	-	3.6153
25	0.5856	0.6777	0.2485	1.7754	0.3282	-	-	-	-	3.6153
Levelized Tariff	0.5856	0.6777	0.2485	1.7754	0.3282	1.4890	0.6216	1.6785	0.5199	7.9244



Indus Wind Energy Limited
Debt Servicing Schedule - SBP Loan

SBP refinance rate	3.00%	p.a
Spread+saving share	2.25%	
All-in Rate	5.25%	p.a

Period	PKR			PKR/kWh	
	Outstanding	Principal	Interest	Principal	Interest
1	4,126,955,167	103,173,879	54,166,287	-	-
2	4,023,781,288	103,173,879	52,812,129	-	-
3	3,920,607,408	103,173,879	51,457,972	-	-
4	3,817,433,529	103,173,879	50,103,815	2.4795	1.2529
5	3,714,259,650	103,173,879	48,749,658	-	-
6	3,611,085,771	103,173,879	47,395,501	-	-
7	3,507,911,892	103,173,879	46,041,344	-	-
8	3,404,738,013	103,173,879	44,687,186	2.4795	1.1228
9	3,301,564,133	103,173,879	43,333,029	-	-
10	3,198,390,254	103,173,879	41,978,872	-	-
11	3,095,216,375	103,173,879	40,624,715	-	-
12	2,992,042,496	103,173,879	39,270,558	2.4795	0.9926
13	2,888,868,617	103,173,879	37,916,401	-	-
14	2,785,694,738	103,173,879	36,562,243	-	-
15	2,682,520,858	103,173,879	35,208,086	-	-
16	2,579,346,979	103,173,879	33,853,929	2.4795	0.8624
17	2,476,173,100	103,173,879	32,499,772	-	-
18	2,372,999,221	103,173,879	31,145,615	-	-
19	2,269,825,342	103,173,879	29,791,458	-	-
20	2,166,651,463	103,173,879	28,437,300	2.4795	0.7322
21	2,063,477,583	103,173,879	27,083,143	-	-
22	1,960,303,704	103,173,879	25,728,986	-	-
23	1,857,129,825	103,173,879	24,374,829	-	-
24	1,753,955,946	103,173,879	23,020,672	2.4795	0.6021
25	1,650,782,067	103,173,879	21,666,515	-	-
26	1,547,608,188	103,173,879	20,312,357	-	-
27	1,444,434,308	103,173,879	18,958,200	-	-
28	1,341,260,429	103,173,879	17,604,043	2.4795	0.4719
29	1,238,086,550	103,173,879	16,249,886	-	-
30	1,134,912,671	103,173,879	14,895,729	-	-
31	1,031,738,792	103,173,879	13,541,572	-	-
32	928,564,913	103,173,879	12,187,414	2.4795	0.3417
33	825,391,033	103,173,879	10,833,257	-	-
34	722,217,154	103,173,879	9,479,100	-	-
35	619,043,275	103,173,879	8,124,943	-	-
36	515,869,396	103,173,879	6,770,786	2.4795	0.2115
37	412,695,517	103,173,879	5,416,629	-	-
38	309,521,638	103,173,879	4,062,471	-	-
39	206,347,758	103,173,879	2,708,314	-	-
40	103,173,879	103,173,879	1,354,157	2.4795	0.0814



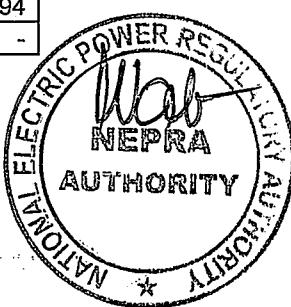
Indus Wind Energy Limited
Debt Servicing Schedule - Foreign Loan

LIBOR	0.20913%	p.a
Spread	4.25%	p.a
All-in Rate	4.4591%	p.a

Period	USD				PKR/kWh	
	Outstanding	Repayment percentage	Principal	Interest	Principal	Interest
1	24,952,138	1.37%	342,094	278,162	-	-
2	24,610,044	1.29%	320,635	274,348	-	-
3	24,289,409	1.31%	325,875	270,774	-	-
4	23,963,534	1.34%	333,860	267,141	1.4139	1.1658
5	23,629,675	1.35%	337,852	263,419	-	-
6	23,291,823	1.37%	341,844	259,653	-	-
7	22,949,978	1.39%	347,334	255,842	-	-
8	22,602,645	1.42%	354,071	251,970	1.4766	1.1022
9	22,248,574	1.44%	359,810	248,023	-	-
10	21,888,764	1.46%	364,301	244,012	-	-
11	21,524,463	1.48%	370,040	239,951	-	-
12	21,154,423	1.52%	378,274	235,826	1.5742	1.0347
13	20,776,148	1.54%	383,265	231,609	-	-
14	20,392,883	1.56%	388,255	227,336	-	-
15	20,004,628	1.58%	394,493	223,008	-	-
16	19,610,135	1.61%	402,728	218,610	1.6772	0.9628
17	19,207,407	1.64%	408,217	214,121	-	-
18	18,799,190	1.66%	413,956	209,570	-	-
19	18,385,234	1.69%	420,444	204,955	-	-
20	17,964,791	1.72%	428,678	200,268	1.7869	0.8862
21	17,536,113	1.74%	434,666	195,490	-	-
22	17,101,447	1.77%	441,154	190,644	-	-
23	16,660,293	1.80%	448,140	185,726	-	-
24	16,212,153	1.83%	455,876	180,730	1.9029	0.8046
25	15,756,277	1.86%	463,112	175,648	-	-
26	15,293,165	1.88%	470,098	170,486	-	-
27	14,823,067	1.91%	477,584	165,245	-	-
28	14,345,483	1.95%	485,569	159,921	2.0275	0.7177
29	13,859,915	1.98%	493,054	154,508	-	-
30	13,366,860	2.01%	501,039	149,011	-	-
31	12,865,821	2.04%	509,024	143,426	-	-
32	12,356,798	2.07%	516,759	137,751	2.1596	0.6251
33	11,840,039	2.11%	525,243	131,991	-	-
34	11,314,796	2.14%	533,976	126,135	-	-
35	10,780,821	2.18%	542,709	120,183	-	-
36	10,238,112	2.20%	549,945	114,133	2.3007	0.5265
37	9,688,167	2.24%	559,427	108,002	-	-
38	9,128,740	2.28%	569,158	101,766	-	-
39	8,559,581	2.32%	578,391	95,421	-	-
40	7,981,191	2.35%	586,625	88,973	2.4522	0.4214
41	7,394,566	2.39%	595,857	82,433	-	-
42	6,798,709	2.43%	606,586	75,791	-	-
43	6,192,123	2.47%	616,318	69,029	-	-
44	5,575,805	2.50%	623,055	62,158	2.6107	0.3094
45	4,952,750	2.54%	634,533	55,212	-	-

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46	4,318,217	2.59%	646,510	48,139	-	-
47	3,671,707	2.63%	656,990	40,932	-	-
48	3,014,717	2.66%	663,228	33,608	2.7811	0.1902
49	2,351,489	2.71%	675,953	26,214	-	-
50	1,675,536	2.76%	689,178	18,679	-	-
51	986,358	3.95%	986,358	10,996	-	-
52	-	-	-	-	2.5141	0.0598

✓ ✓

