



Registrar

National Electric Power Regulatory Authority Islamic Republic of Pakistan

NEPRA Tower, Attaturk Avenue (East), G-5/1, Islamabad.

Tel: +92-51-9206500, Fax: +92-51-2600026

Web: www.nepra.org.pk, E-mail: registrar@nepra.org.pk

No. NEPRA/R/ADG(Trf)/TRF-489/AWPL-2019/73-77

January 02, 2026

Subject: Decision of the National Electric Power Regulatory Authority in the matter of Tariff Adjustment at Commercial Operations Date of Act 2 Din Wind (Pvt.) Ltd. (Formerly Act 2 Wind (Pvt.) Limited)

Dear Sir,

Please find enclosed herewith the subject Decision of the Authority alongwith **Annex-I, II & III** (total 29 pages) regarding tariff Adjustment at Commercial Operations Date of Act 2 Din Wind (Pvt.) Ltd. (Formerly Act 2 Wind (Pvt.) Limited) in Case No. NEPRA/TRF-489/AWPL-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
(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. Director, Act 2 Wind Power (Pvt.) Ltd. Office No. 1002, 10th Floor, Emerald Tower, Near 2 Talwar, Karachi



**DECISION OF THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY IN THE MATTER OF TARIFF
ADJUSTMENT AT COMMERCIAL OPERATIONS DATE (COD) OF ACT 2 DIN WIND (PVT.) LTD. (FORMERLY
ACT 2 WIND (PVT.) LIMITED)**

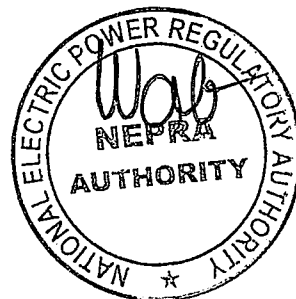
Introduction:

1. M/s. ACT 2 DIN Wind (Pvt) Ltd. ("AWPL" or "the petitioner" or "the company") formerly known as ACT 2 Wind (Pvt.) Ltd. is a company formed to develop 50 MW wind power project ("the Project"). The Generation License to the Company was issued by the National Electric Power Regulatory Authority ("NEPRA" or "the Authority") on April 4, 2017.
2. The Authority issued the tariff determination of AWPL on November 19, 2018 wherein a levelized tariff of PKR. 5.6655/kWh (US Cents 4.7212/kWh) was approved. The Authority then issued its decision on July 23, 2020 in the matter of tariff modification petition filed by AWPL. Afterwards, the decision in the matter of motion for leave for review filed by AWPL against the tariff modification decision was issued on May 17, 2021 (all the mentioned decisions shall be collectively or separately be referred to as "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 petitioner has submitted M/s DNV-GL certification No. TC-DNVGL-SE-0074-00766-0 dated August 16, 2016 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 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.

S M F



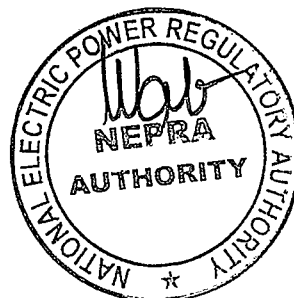


- The tariff has been determined on debt: equity ratio of 80:20. The tariff shall be adjusted on actual debt: equity mix at the time of COD, subject to equity share of not more than 20%. For equity share of more than 20%, allowed IRR shall be neutralized for the additional cost of debt: equity ratio.
 - 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 review decision issued on May 17, 2021, changed the adjustment clause with respect to O&M component of tariff which is reproduced below:
- The O&M cost, its mix, and the corresponding mechanism thereof as approved in the Tariff Determination of ACT 2 Wind Power (Pvt) 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.).

Filing of Tariff Adjustment Request at COD

5. AWPL submitted that the company has successfully achieved COD on February 27, 2022 at 00:00 Hrs. In this regard, AWPL has submitted Notification of COD of Complex issued by Central Power Purchasing Agency (Guarantee) Ltd. vide No. DGMT(R)/MT(B&W)/ACT2/6089-101 dated April 04, 2022.
6. The company through letter No. ACT2/NEPRA/TU dated December 08, 2022 submitted its application for adjustment of tariff at COD 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 AWPL along with its request for adjustment of tariff was not complete. Accordingly, AWPL was required time and again to submit various information through numerous telephonic conversation and emails. Subsequently, AWPL vide letter dated December 13, 2023 submitted addendum to the above tariff adjustment application regarding evidence of final payment to EPC contractor and certificate issued by EPC Contractor. AWPL also submitted an Undertaking for Correctness of Information dated January 22, 2024 wherein AWPL has been mentioned that the information/data submitted is correct and nothing has been concealed or misstated.

8 17 9





8. Below is the summary of project cost allowed by the Authority in the Tariff Determination and claimed by AWPL in its tariff adjustment application:

Project Cost Heads	Determined		Claimed at COD	
	USD Million	PKR Million	USD Million	PKR Million
EPC Cost	57.04	6,844.68	57.04	9,541.83
EPC Contractor Claims	-	-	3.20	566.98
Duties and Taxes	-	-	0.58	91.09
Project Development Cost	2.50	300.00	2.07	315.50
Insurance during construction	0.29	34.20	0.29	46.33
Financing Fee and Charges	1.20	143.52	1.86	301.48
Interest during Construction	1.93	231.84	1.94	332.62
Total Project Cost	62.95	7,554.24	66.98	11,195.83

9. **Audit of Project Cost:**

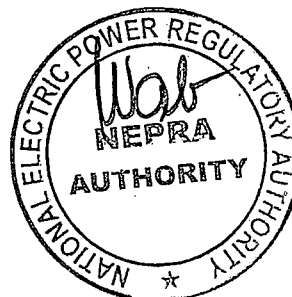
10. AWPL submitted Audit Report of Naveed Zafar Ashfaq Jaffery & Co. dated March 08, 2023. In the said Audit Report, the project cost as verified by the Auditors is given below:

Description	Project Costs	
	USD Million	PKR Million
EPC Cost	57.04	9,541.83
Duties and Taxes	0.58	91.09
Project Development Cost and Non-EPC cost	2.07	315.50
Insurance during construction	0.28	45.66
Financing Fee and Charges	1.86	301.48
Interest during Construction	1.94	332.62
Total Project Cost	63.77	10,628.18

Force Majeure and Construction Period:

11. The Tariff Determination stipulated that the *"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."*
12. In the tariff adjustment application and during the processing thereof, AWPL informed that post issuance of the Tariff Determination, the company obtained Letter of Support ("LOS") from Alternative Energy Development Board ("AEDB") on November 07, 2019, signed the Energy Purchase Agreement ("EPA") with CPPAGL on November 11, 2019 and signed Implementation Agreement ("IA") with GOP on November 12,

8 9 10

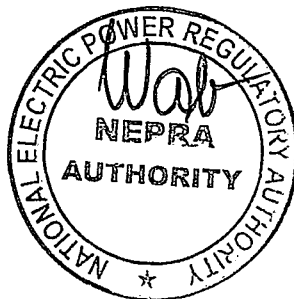




2019. Accordingly, AWPL achieved Financial Closing ("FC") on November 18, 2019. In the EPA, the Required Commercial Operations Date ("RCOD") is defined as 15 months following the date on which FC occurs. However, AWPL achieved Commercial Operations Date ("COD") with effect from February 27, 2022.

13. In the tariff adjustment application, AWPL has requested construction period of about 19 months from the date of start of construction period (issuance of "Notice to Commence") i.e., from July 27, 2020 till actual COD February 27, 2022 as opposed to the construction period of 15 months allowed in the Tariff Determination. The main reason for the delay in achieving COD as cited by AWPL is COVID-19 Pandemic (OFME) and provision of interconnection facility by the power purchaser.
14. AWPL submitted that due to the situation prevailing during Pandemic, the EPC contractors issued Force Majeure Event ("FME") notices to it, pursuant to relevant provisions under the construction (onshore) and supply (offshore) contracts. The notice of FME was served by National Transmission & Despatch Company Ltd. ("NTDCL") to CPPA-G on February 06, 2020 and March 17, 2020. AWPL submitted it was not only its obligations that got impacted by COVID-19; CPPA-G also notified the company of occurrence of an Other Force Majeure Event ("OFME") vide letter dated March 27, 2020 due to the Pandemic as intimated to the power purchaser by the transmission operator, i.e., NTDCL (now National Grid Company or NGC).
15. AWPL in tariff adjustment application submitted that construction work was started on July 27, 2020. AWPL submitted that although extension of 237 days was granted by the power purchaser and the delay in availability of Purchaser interconnection facilities is 137 days. However, due to the company's delay mitigation measures, the actual delay was restricted to 123 days.
16. For justification of the extended period claims, AWPL also referred the Authority's decision dated September 02, 2021 in the matter of tariff modification petition filed by Pak Matari Lahore Transmission Company (Pvt.) Ltd. ("PMLTCPL"), decision dated July 3, 2017 in the matter of tariff adjustment at COD of Uch-II Power (Pvt.) Ltd. and decision dated November 23, 2012 in the matter of motion for leave for review filed by Sapphire Electric Company Ltd ("SECL") and requested to allow extension in RCOD as approved by the power purchaser and the corresponding justified costs incurred up to the COD.
17. The Authority has noted that under the EPA signed between AWPL and CPPAGL, 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 section 6.5 (a) of the EPA that COD shall be extended on day-for-day basis in case of OFME that materially and adversely affects the purchaser's ability to perform its obligations.
18. It is pertinent to mention here that considering the comments of CPPA-G and AEDB in similar case of MGEL, the Authority did not account for the additional cost claimed by MGEL on account of delay/extension in RCOD.
19. 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 subscribed to a view that the parties while signing the contracts should 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. It is pertinent to mention here that in similar case of MGEL, the power purchaser and the GOP (AEDB) endorsed extension in RCOD with no additional cost on

8 9





account of this delay/extension as the same is not covered under the EPA/IA. In addition, the Authority has noted that the petitioner itself acknowledged that in case of PMLTCPL, the Authority allowed extension in RCOD without allied cost.

20. Keeping in view the above, the Authority has decided to disallow Interest during Construction ("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, based on 15 months construction period allowed in the reference generation tariff works out as October 01, 2020 till RCOD of December 31, 2021 excluding OFME period. Hence the IDC and ROEDC has been calculated on the basis of allowed construction period.

Adjustment of Engineering Procurement and Construction Cost:

21. The Authority in the Tariff Determination allowed Engineering Procurement and Construction ("EPC") cost of USD 57.04 million to AWPL 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."

".....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."

22. AWPL in its adjustment application followed by addendum application has claimed EPC cost of USD 57.04 million (PKR 9,541.83 million). The breakup of the EPC cost as approved in the Tariff Determination, claimed by AWPL and as verified through Audit Report submitted by the Company is given hereunder:

Description	Tariff Determination		Claimed at COD		Audit Report
	USD Million	PKR Million	USD Million	PKR Million	PKR Million
Offshore EPC	57.04	6,844.68	45.02	7,563.15	9,541.83
Onshore EPC			12.02	1,978.68	
Total	57.04	6,844.68	57.04	9,541.83	9,541.83

Offshore EPC Cost:

23. For the claim of EPC offshore cost, the petitioner has submitted copy of offshore supply contract dated October 03, 2019 signed with Hangzhou Huachen Electric Power Control Company Limited ("HEPCCL") for the amount of USD 45.02 million. In addition to above said contract, AWPL submitted copies of commercial invoices, SWIFT payment messages, relevant bank statements, SBP (Weighted average exchange rates used on the invoices) and NBP exchange rate sheets. Further, the milestone completion certificates issued by Lenders' Technical Adviser's / Owner's Engineer namely DNV GL, and import documents such as copy of Commercial Invoices, Goods Declaration ("GD"), Bill of Lading ("BL") were also submitted by AWPL.

8

1

7





24. During processing, AWPL has also submitted the certificate of compliance issued by HEPCCCL dated March 17, 2022 which states that the wind turbines installed at AWPL Site contains equipment of same design, specification, and country of origin as mentioned in M/s DNV-GL certification No. TC-DNVGL-SE-0074-00766-0 dated August 16, 2016.
25. The Audit Report provides that the schedule of costs, as prepared by management of the company, with respect to EPC offshore was obtained. Then 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, NBP exchange rate sheets (for payments made from Bank AL Habib Limited 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.
26. In the supply contract, it is noted that the price of USD 45.02 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 40.52 million while the rest of the contractual amount pertains to the completion of reliability run tests and final delivery of the equipment which amounts to USD 4.50 million.
27. For the payments made from USD Account, AWPL has converted PKR Rupees into USD using the exchange rates used by the interbank applicable on the payment dates to compute the corresponding PKR amount. For the payments made from PKR Accounts, the petitioner has used exchange rates as agreed with the said banks, for which intimation letters to banks and swift messages were provided and verified.
28. The comparison of offshore EPC cost as claimed by AWPL, verified by Auditors and as being allowed in this decision, is given below:

Claimed by AWPL		Verified by Auditors		Approved	
USD Million	PKR Million	USD Million	PKR Million	USD Million	PKR Million
45.02	7,563.15	45.02	7,563.15	45.02	7,465.29

29. The difference is due to the payments made by the petitioner beyond RCOD has been restricted to the exchange rate applicable on December 31, 2021 i.e., PKR 177.95/US\$.

Onshore EPC Cost

30. For the claim of the EPC onshore cost, the petitioner has submitted copy of EPC construction contract dated October 03, 2019 signed with Hydrochina International Engineering Company Limited ("HIECL") for USD 12.019 million and subsequent amendments thereon. In addition to the said contract, AWPL also submitted copies of sales tax invoices, pay orders, real-time gross settlement ("RTGS") message, relevant bank statements, SBP weighted average customer exchange rates sheets, Withholding Tax ("WHT") Computerized Payment Receipts ("CPR") and milestone completion certificates issued by Owner's Engineer namely Renewable Resources (Pvt.) Ltd. and DNV GL, where applicable.
31. The Audit Report provides that the schedule of costs, as prepared by management of the company, with respect to EPC onshore was obtained. Then 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, swift acknowledgement, SBP's weighted average exchange rates sheets, milestone completion certificates, cheque, CPR for WHT paid to FBR, CPR number with copy of sales tax invoice, pay order and CPR

S

1 7





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.

32. In the onshore contract, it is noted that the price of USD 12.01 million was agreed between the parties. The parties also agreed on the schedule based on milestones for the payment. Out of total claimed amount 51% was paid to Descon Engineering Limited on account of subcontracted works performed and invoices raised for payments of onshore construction cost.
33. The onshore contract provides that 75 % of the USD amount shall be converted into equivalent PKR at the exchange rate on the date of Notice to Proceed ("NTP") (PKR 166.7578 /USD prevailing on July 27,2020) while the remaining 25% being converted into equivalent PKR on date of payment. The amount of USD 0.96 million has been claimed as paid, vide Addendum dated December 13, 2023 and the same has been verified. This amount of USD 0.96 million equivalent to PKR 176.121 million has been claimed including a supplementary payment of PKR 13.154 million (due to exchange rate adjustment on advance payment). As per clause 14.1 A (b) sub clause (a) of the construction contract, the preliminary payment shall be converted at the exchange rate prevailing on the date of issuance of such invoice. Since invoice has already been raised on June 08, 2020 and paid on July 23, 2020 therefore differential claim on account of supplementary payment has not been allowed. The Authority has noted that AWPL used SBP weighted average exchange rate (sell side) on the date of invoice instead of date of payment for conversion of 25% invoice payment.
34. The comparison of onshore EPC cost, as claimed by AWPL, verified by Auditors and is being allowed in this decision after review and verification of the above documents, is given below:

Claimed by AWPL		Verified by Auditors		Allowed	
USD Million	PKR Million	USD Million	PKR Million	USD Million	PKR Million
12.019	1,978.684	12.019	1,978.684	12.019	1,965.595

35. Keeping in view above, the comparison of total EPC cost claimed by AWPL and allowed by the Authority in this decision is given hereunder:

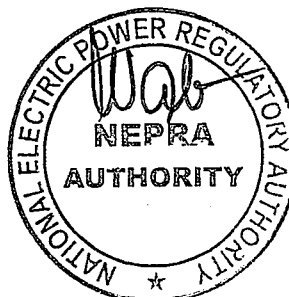
EPC	Claimed by AWPL		Allowed	
	USD	PKR	USD	PKR
	Million			
Offshore	45.02	7,563.15	45.02	7,465.29
Onshore	12.02	1,978.68	12.02	1,965.59
Total	57.04	9,541.83	57.04	9,430.88

EPC Contractor Claims

36. AWPL has submitted that due to overall delays on account of FME (i.e., delay in construction works and delay in provision of Purchaser Interconnection Facilities), the additional costs borne by the Company are mentioned as below:

8

1 7





Description	Claimed by AWPL	
	USD	PKR
	Million	
Additional cost claim under Equipment Supply Contract-Offshore	0.889	157.745
Additional cost claim under Construction Contract-Onshore	2.170	384.692
Additional Logistics cost claim under FME	0.138	24.540
Total	3.197	566.977

37. The Authority allowed fixed EPC cost to AWPL in tariff determination with exchange rate variation on foreign portion. No upward revision of EPC cost was allowed in the reference generation tariff. In view thereof the claim of AWPL on account of EPC contractor's claim is not in the scope of COD adjustment and the same has been disallowed in the instant case.

Adjustment of Duties and Taxes:

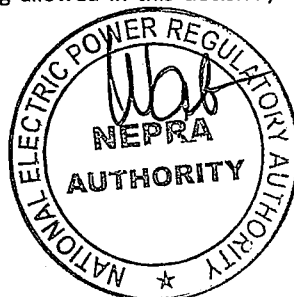
38. The Tariff Determination did not account for the impact of duties and taxes and provides the following adjustment with respect to this head:

"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."

39. AWPL in its COD tariff application has requested for the duties and taxes of USD 0.58 million (PKR 91.09 million). Breakup of which is given hereunder:

Description	Tariff Determination		Claimed by AWPL		Verified by Auditors
	USD Million	PKR Million	USD Million	PKR Million	PKR Million
SIDC Cess	As per actual		0.58	91.09	91.09

40. 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), PD account statement downloaded from Company WBOC account and bank statement, where applicable. The schedule of Stamp duty prepared by management and the amounts paid in this regard along with the details appearing therein with respect to respective invoice date, invoice amount (PKR) with copy of invoice and bank statements.
41. In support of its claim with respect to the SIDC payment, AWPL has submitted copies of relevant commercial invoices, shipment invoices, GDs, BLs, Cess CPRs, cheques, bank statement and certificate of Independent Engineer etc.
42. The Authority examined the submitted documents by AWPL. Accordingly, the comparison of duties and taxes, as claimed by AWPL, verified by Auditors and as being allowed in this decision, after review and verification of the submitted documents, is given below:





Description	Claimed by AWPL		Verified by Auditors	Approved	
	USD Million	PKR Million	PKR Million	USD Million	PKR Million
SIDC	0.58	91.09	91.09	0.57	91.09

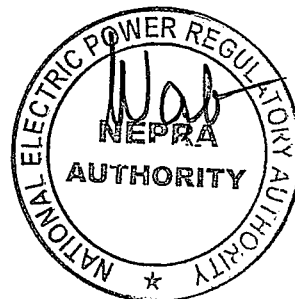
Adjustment of Project Development Cost:

43. The Authority in the Tariff Determination allowed USD 2.50 million in respect of the Project Development Cost ("PDC") to AWPL 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."

44. As per the above mechanism, the maximum amount allowed to AWPL under PDC head @PKR 120/USD works out to be about PKR 300 million. The petitioner in its COD adjustment request has claimed PDC of PKR 315.50 million, equivalent to about USD 2.07 million.
45. The petitioner submitted that due to higher exchange rate during the construction period, the company filed Modification Petition for reconsideration of exchange rate from PKR 120/USD to PKR 160/USD at the then prevailing exchange rate. According to the AWPL, 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."
46. The AWPL further submitted that during construction and development phase Company 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. AWPL 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. AWPL submitted that in view of the above and the extension in RCOD, requested the Authority to allow the actual incurred cost under PDC. AWPL submitted following detailed breakup of the claimed PDC:

PDC Heads	Claimed	
	PKR	USD
	Million	
Administrative Expenses	8.640	0.056
Advisory Services	95.994	0.634
Fees & Subscription	10.413	0.063
Government Authorities	35.816	0.258
Land Lease Hold	15.178	0.131
Owner's Engineering Services	78.628	0.484
Salaries and Benefits	53.298	0.321
Travelling and Vehicle Running Expenses	10.655	0.078
Vehicle (Fixed Assets)	6.882	0.041
Total	315.504	2.066





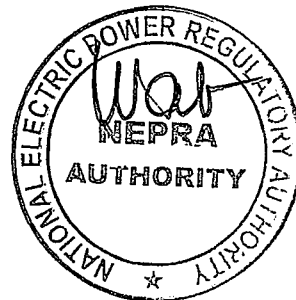
47. The Auditor's Report provides that the company incurred PDC amounting to PKR 315.504 million (USD 2.067 million). The Audit Report also provides that the schedules of costs prepared by the management were obtained and the amount paid were checked with the details appearing therein the supporting documents with respect to nature of services/expenses. The supporting documents included invoices/claim expense form and verified for invoices dates, amounts, vendors name and payment dates. The amounts paid are matched with copies of invoices/claim expense vouchers to the pay orders/petty cash vouchers where applicable and relevant bank statements. The Auditor also stated that no difference was found.
48. It is pertinent to note here that petitioner's understanding regarding tariff modification decision dated July 23, 2020 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." also relates to PDC is not correct since the cost allowed under PDC i.e., PKR 300 million was the maximum limit allowed. Hence, no further adjustment in the rupee term was allowed by the Authority in the decision of July 23, 2020.
49. The claim submitted by AWPL has been analysed considering the expenses incurred till revised RCOD. The Authority has noted that the company incurred the total cost of PKR 315.504 million till actual COD. 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. 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 01, 2020 till December 31, 2021. Accordingly, the corresponding USD amounts works out to be about USD 1.84 million, which is being allowed in the decision.

Adjustment of Insurance during Construction

50. The Authority in the Tariff Determination allowed USD 0.29 million for insurance during construction while stating the following mechanism for its adjustment at COD;
- "...Insurance during construction...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."*
51. As per the above mechanism, the maximum amount allowed to AWPL under captioned head @PKR 120/USD works out to be about PKR 34.20 million.
52. The petitioner in its adjustment request has claimed insurance amount of PKR 46.33 million (equivalent to about USD 0.29 million). AWPL submitted that owing to 123 days delay in achieving COD due to the FME, it had to extend its construction period insurance cover over entire actual construction period. AWPL informed that it successfully negotiated with Insurers to provide the insurance cover for extended construction period without any additional premium.
53. As per the details submitted by AWPL the breakup of the claimed insurance during construction period is given hereunder:

S

M 7





Description	Total Premium net of Sales Tax
	PKR Million
Marine Cargo & Marine Delay in start up	16.29
Erection All Risk, Delay in Startup and Third Party Liability, Operational All Risk, Business Interruption and Third Party Liability	25.85
Terrorism Insurance	3.50
Total	45.65
PKR/USD exchange rate	160.97
Total Premium USD	0.285

54. The Auditors in their Report has also verified the amount of PKR 45.65 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 statement 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.
55. In support of its claim, the petitioner has submitted copies of insurance policies, premium invoices, premium payment receipts, extension letters, withdrawal requests and bank statements. An amount equivalent to PKR 1 million is paid as advance on June 05, 2020 and remaining amount of PKR 44.657 million has been paid on November 11, 2020 to insurers i.e., AdamJee Insurance Company Limited, EFU General Insurance Limited and Habib Insurance Company Limited having share of 60 %, 20% and 20 % respectively. 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. 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 34.20 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 prior to December 31, 2021. The resultant amount works out to be about USD 0.21 million which is being allowed in this decision.

Adjustment of Financing Fee and Charges:

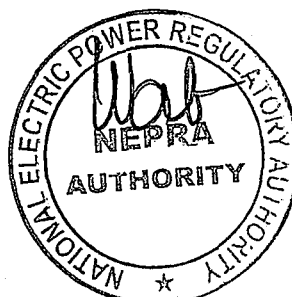
56. The Authority in the Tariff Determination had allowed financing fee and charges of USD 1.196 million. The caption head was allowed at the rate of 2.50% of the approved debt in the Tariff Determination. Following mechanism for the adjustment of financing fee and charges at the time of COD was prescribed;

"....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."

57. As per the above mechanism, the maximum amount allowed to AWPL under this head @ PKR 120/USD works out to be about PKR 143.52 million. The petitioner in its COD adjustment application has claimed financing fee and charges amounting to PKR 301.479 million. In terms of USD, the corresponding amount of USD 1.86 million has been claimed by the petitioner. Below is the detailed breakup of financing fee and charges as claimed by the petitioner and as verified by the Auditors:

8

N 9





Description	Claim		Audited	
	USD	PKR	USD	PKR
	Million			
Arrangement/ Front End Fee	0.76	119.58	1.86	301.479
Commitment fee	0.30	49.11		
Agency, Monitoring Security Trustee Fees	0.09	15.67		
Lender-Legal, Technical & Insurance Advisors	0.71	116.35		
Other Expenses	0.005	0.77		
Total	1.865	301.48	1.86	301.479

58. AWPL 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, the company arranged the balance amount in form of foreign financing through IFC & DEG. Accordingly, the fees and costs under foreign financing were directly linked to exchange rate fluctuations. AWPL further stated that the increase in Financing Fee and Charges from allowed limit of USD 1.196 million to actual incurred USD 1.86 million is due to extended construction period and the increase should therefore be allowed.
59. The Audit Report provides that for financing fee and charges, schedule of costs prepared by management were obtained and the amount paid and the details appearing therein with respect to invoice amount, invoice date, instrument of payment such as cheque, remittance debit advice, swift message and payment date, FBR CPR if any where WHT was paid, and bank statement were verified and no difference was found. For the payable amount schedule of costs were matched with the amount of invoice issued by the Lender by pro-rating same till the date of COD.
60. AWPL in support of its claim has submitted copies of financing agreements and Lender's Legal and Technical Contracts/agreement, Invoices, payment evidences bank statements including tax challans, relevant exchange rate 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 AWPL. However, the term of adjustment of financing fee and charges was not modified. 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 143.52 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 prior to December 31, 2021. The resultant amount works out to be about USD 0.89 million which is being allowed in this decision.

Project Financing:

61. The reference 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 adjustment application, AWPL has submitted that the total project cost has been financed by the company as per the following details:





Description	PKR	USD
	Million	
Equity	2,059.28	12.76
Debt Financing:		
SBP-Local	4,113.23	25.62
Commercial-Foreign	4,265.58	25.43
Total Debt	8,378.81	51.05
Total Project Cost	10,438.09	63.81

62. The total equity injected by the different shareholders, as submitted by AWPL and certified by Auditors' Certificate (BDO Ebrahim & Co. Chartered Accountants) dated August 23, 2021 is provided as under:

Description	No. of Shares issued	PKR
Equity against shares issued	3,000	30,000

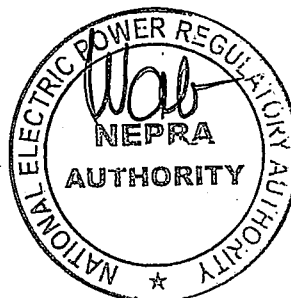
63. AWPL also submitted the audited financial statement and certification by the above referred auditor regarding the advance against equity amounting to Rs. 2,059.248 million (USD 12.76 million). The amount of equity was injected by the company before the RCOD i.e., December 31, 2021. All the injected equity amounts were deposited in Bank Al Habib Limited.
64. The Audit Report provides that the schedule of advance against equity by company's shareholders prepared by management were obtained and matched the amount received and the details appearing therein with respect to shares and their amount, bank statements, and NBP Rate Sheets, where applicable and no difference was found. The amount of total equity as verified by the auditors is PKR 2,059.28 million.
65. AWPL in support of the equity injections submitted copies of bank statements in which equity was injected, auditor's certificate in respect of consideration received as advance against Equity, Form-A (SECP) for Equity against shares issued, exchange rate sheets and audited accounts for the construction period. AWPL has submitted Auditors' Certificate at various dates that certified the amount of consideration received as Equity and advance against equity.
66. It has been observed that the Company has not issued shares against the equity received in advance. The audited financial statements for FY 2024-25, as submitted by the Company, also corroborate the same. Accordingly, AWPL is hereby directed to ensure compliance by filing SECP Form-3 on or before June 30, 2026, and to submit evidence thereof to NEPRA.
67. Recapitulating the above, following table shows the injections of the debt and equity amounts by the company:

Source of Funds	Amount USD in million	Amount PKR in million
SBP RE Scheme debt	25.62	4,113.23
Commercial Foreign debt (LIBOR)	25.43	4,265.58
Total Debt	51.050	8,378.81
Equity	12.73	2,059.28
Total Funding	63.78	10,438.08

68. Based on above verified numbers of the injections, the debt to equity ratio works out to be following:

S

M 7





Source of Funds	USD Terms	PKR Terms
Debt	80.04%	80.27%
Equity	19.96%	19.73%

69. The Authority in Tariff Determination allowed debt: equity ratio of 80:20 whereas the equity beyond 20% was considered to be neutralized with the notional debt. In the instant case, the actual equity share works out as 19.96 % (USD term) which is within the maximum approved limit. The actual debt equity ratio works out to be 80.04%: 19.96%. Accordingly the COD tariff has been worked out on the same basis.

Adjustment of Debt Amount and Interest during Construction:

70. The Tariff Determination of AWPL 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 provisions:

"In case the petitioner is not able to secure financing under SBP scheme then the tariff of AWPL 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 that it exhausted the option of availing financing under SBP scheme before availing part/full of conventional local/foreign loan."

71. 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 October 02, 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 decided 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.
72. AWPL 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, AWPL had to arrange the balance debt financing in foreign currency from IFC. AWPL 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.
73. On the review of the latest financing documents as submitted by the petitioner, it was noted that following debt commitments were secured by the AWPL:

Source of debt	Financiers	Debt Commitment
SBP RE Scheme debt	• Bank Al Habib Limited	PKR 4,113.234 million
Commercial Foreign debt (LIBOR)	• International Finance Corporation • DEG-Deutsche Investitions	USD 12.716 million USD 12.716 million

74. AWPL submitted that out of total debt financing, 50% was secured in local debt (PKR) and 50% in foreign debt (USD). The amount of debt as claimed by AWPL and verified by the Auditors is provided as under:

S

17





Source of debt	Claimed by AWPL		Verified by Auditors	
	Amount in USD (Million)	Amount in PKR (Million)	Amount in USD (Million)	Amount in PKR (Million)
SBP RE Scheme debt-Local	25.618	4,113.234	25.618	4,113.234
Commercial Foreign debt	25.432	4,265.584	25.432	4,265.584
Total	51.05	8,378.818	51.05	8,378.818

75. It is noted that the SBP loan has been secured by the company for 10 years repayment period at the cost of 5% (5.40% 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.
76. 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.
77. AWPL has submitted copies of financing agreements, copies of bank statements in which debt drawdown were credited, NBP rate sheets and audited financial statements for the construction period. The submission of AWPL have been checked with source document. 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 AWPL and approved in this decision, is provided below:

Debt Sources	Amount in USD (Million)	Amount in PKR (Million)	%age of debt in USD term	Interest Rate	Repayment Period
SBP RE Scheme	24.90	4,113.23	50.18%	<ul style="list-style-type: none">• Rate before refinancing is KIBOR+2%• SBP Refinancing rate is 5%+0.4% saving	10 years
Commercial Foreign loan	24.73	4,085.32	49.82%	3 month LIBOR + 4.25%	13 years
Total	49.63	8,198.55	100.00%		

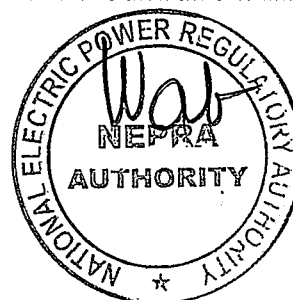
78. In the Tariff Determination, the IDC of USD 1.93 million (PKR 231.84 million) was approved. The said amount of IDC was computed on the basis of 100% SBP refinancing scheme at 6% interest rate using certain percentage of drawdowns for the construction period of 15 months. The Tariff Determination provides the following mechanism with respect to adjustment of IDC at the time of COD:

"IDC will be recomputed at the time of 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%,

8

47





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 (Sinasure 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."

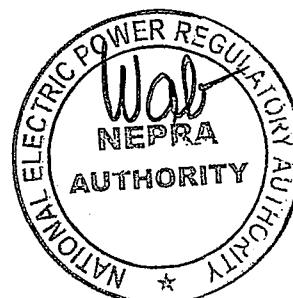
79. AWPL in its COD tariff application has requested for IDC based on actual debt drawdown for the actual construction period of almost 20 months. Below are the details of IDC as claimed by AWPL and as verified by Auditors:

Description	Claimed by AWPL		Verified by Auditors	
	USD Million	PKR Million	USD Million	PKR Million
SBP RE scheme	1.505	253.895	1.94	332.62
Commercial Foreign Loan	0.485	86.168		
Less: Interest Income	(0.045)	(7.443)		
Net IDC	1.945	332.62	1.94	332.62

80. AWPL claimed net IDC after adjustment of interest income. The amount of IDC comes out to be USD 1.94 million (PKR 332.62 million) before adjustment of interest income.
81. The Audit Report provides that schedule of costs prepared by management was obtained and matched the amount paid and the details appearing therein with respect to payment date, interest rate and exchange rate with copy of invoice, swift acknowledgement, bank debit advice, SBP's KIBOR rate sheet, LIBOR historical rate report and bank statement, where applicable 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.
82. AWPL in support of the claim has submitted copies of financing agreement, interest payment invoices, bank statement, exchange rate sheets, KIBOR rate sheets, 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 (i.e., 1%) as a result of sharing of spread in a ratio of 60:40

S

27





(Purchaser: Producer) has also been checked and considered. 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 01, 2020 till December 31, 2021 excluding OFME period of 237 days i.e., from February 06, 2020 till September 30, 2020 and as per precedent case of MGEL is given hereunder:

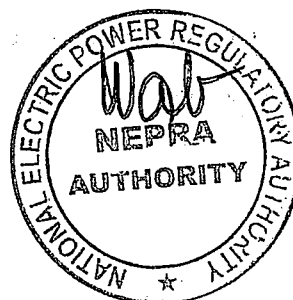
IDC	Total Drawdowns	Interest Rate	Interest Amount	
			USD in million	PKR in million
Local Loan:	PKR in million			
SBP RE scheme	4,039.68	<ul style="list-style-type: none">• Rate before refinancing is KIBOR+2%• SBP Refinancing rate is 5%+0.4% saving	1.17	195.42
Foreign Loan:	USD in million			
Commercial Foreign loan	24.73	<ul style="list-style-type: none">• LIBOR+4.25%	0.32	56.33
Total Interest payment			1.50	251.74

83. The interest amount of PKR 195.42 million in respect of SBP loan includes interest amount of PKR 7.5 million paid at KIBOR + 2% 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 5.4%.
84. 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 amount paid in USD has been converted in PKR using the above said mechanism.
85. As discussed above, the Authority has decided to allow the construction period of 15 months therefore the amount of IDC to be allowed to the petitioner has also been restricted till December 31, 2021 excluding OFME period of 237 days i.e., from February 06, 2020 till September 30, 2020, which has been computed using the following steps:
- The amount of IDC as actually paid and verified till RCOD and actual COD has been added in the capital cost (EPC, Duties, PDC, insurance during construction, Financing Fee) as allowed in this decision to arrive at the verified project cost.
 - 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
 - That amount of debt was then sub-divided into their actual percentages i.e., SBP loan (50.2%) and foreign loan (49.8%).
 - The percentage of each loan as actually disbursed till COD was applied on the verified debt amount.
 - The IDC was then recomputed on the portion of debt amounts which is disbursed till COD using the actual schedule of drawdowns.

Adjustment of Interest Income

86. The petitioner has claimed that it has earned an interest income to the tune of PKR 7.44 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.

8. 14. 7





87. Given the fact that interest cost to the limit of COD (December 31, 2021) excluding the OFME period has been allowed, therefore, the impact of verified interest income has also been limited to COD excluding the OFME period, i.e., PKR 7.83 million.
88. Accordingly, the amount of allowed IDC net of interest income, following at the above steps, worked out as under which is being allowed in the decision:

Description	Approved IDC	
	USD	PKR
	Million	
SBP Loan	1.17	195.42
Commercial Foreign loan	0.32	56.33
Interest Income	(0.05)	(7.83)
Total	1.46	243.91

89. 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 in this decision is provided as under:

Description	Determined		Claimed		Auditors		Allowed	
	USD	PKR	USD	PKR	USD	PKR	USD	PKR
	Million							
Total EPC Cost	57.04	6,844.68	57.04	9,541.83	57.04	9,541.83	57.04	9,430.89
EPC Contractor Claims			3.20	566.98				
Duties and Taxes	-	-	0.58	91.09	0.58	91.09	0.57	91.09
Project Development Cost	2.50	300.00	2.07	315.50	2.07	315.50	1.84	300.00
Insurance during construction	0.29	34.20	0.29	46.33	0.28	45.66	0.21	34.20
Financing Fee and Charges	1.20	143.52	1.86	301.48	1.86	301.48	0.89	143.52
Interest during Construction	1.93	231.84	1.99	340.06	1.99	340.06	1.50	251.74
Interest Income	-	-	(0.04)	(7.44)	(0.04)	(7.44)	(0.05)	(7.83)
Total Project Cost	62.952	7,554.24	66.98	11,195.83	63.77	10,628.18	62.01	10,243.59

90. 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 being approved in this decision:

S

A 7





Loans	USD	PKR
	Million	
SBP loan	24.90	4,113.23
Foreign loan	24.73	4,085.32
Total	49.63	8,198.55

Adjustment of Equity Amount, ROE & ROEDC:

91. AWPPL requested to allow ROEDC PKR 0.2173/kWh and ROE Rs. 1.9977/kWh on the basis of equity amounting PKR 2,059.28 million (USD 12.76 million) injected for the construction till actual COD including OFME period. All the injected equity amount were deposited in Bank Al-Habib Limited current account before RCOD. The detail in this regard has been discussed in preceding paragraph.
92. Based on the review and verification of the above documents, the claim of AWPL has been found correct. The total of equity injected and advance against equity in terms of equivalent USD amount comes out to be 12.73 million. The ratio of equity contribution comes out to be within the prescribed percentage allowed in the Tariff Determination therefore, the Authority has decided to consider the actual equity contribution. Based on the project cost being approved in this decision, the amount of equity works being allowed in this decision comes out as following:

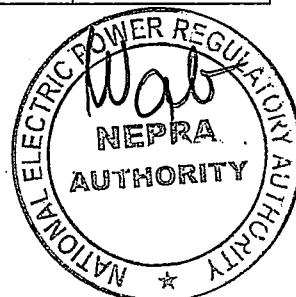
Equity Share	USD	PKR
	Million	
	12.38	2,045.07

93. The ROEDC component of PKR 0.1944/kwh was approved in the Tariff Determination, while stating the following mechanism for its adjustment:

"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. The Authority observed that construction period was allowed for 15 months started from October 1, 2020 to December 31, 2021. The Authority in Tariff Determination allowed equity maximum of 20% of project cost. The assessed equity comes out to be 19.96% and the same is hereby allowed to AWPPL being within the prescribed limit. Therefore, the Authority decided to allow the ROEDC based on assessed equity amount.
95. 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 amount over the actual equity amount. The detailed computations are explained in the following table:

Computation of ROEDC	USD Million
A. Actual Equity Injection	12.73
B. Percentage of Actual Injections over Total	100%
C. Total Approved Equity Amount	12.38





D. Amount Drawn (C*B)	12.38
E. ROEDC Verified	1.37
F. ROEDC Assessed (E/A*D)	1.33

96. Using the PMT formula, the ROEDC component works out to be PKR 0.1944/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 12.38 million comes out as USD 1.63 million. Accordingly, the ROE component works out to be PKR 1.7437/kWh (using exchange rate of PKR 177.95/USD as on 31st December, 2021).
97. It is important to mention here that the equity IRR of 14% per annum was allowed to AWPL 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

98. The Authority in the Tariff Determination allowed O&M cost of USD 23,000 per MW per annum for AWPL. The allowed O&M had approved in the ratio of 50:50 in local and foreign components. Detail is as under:

O&M	Tariff (PKR/kWh)	Indexation
Local	0.4146	CPI (General)
Foreign	0.4146	US-CPI and PKR/USD Exchange rate
Total	0.8292	

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

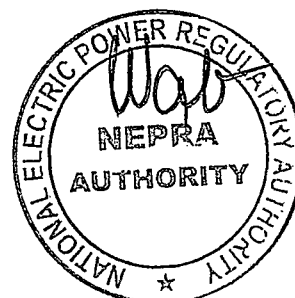
"The O&M cost, its mix, and the corresponding mechanism thereof as approved in the Tariff Determination of ACT 2 Wind Power (Private) Limited shall be applicable for the period during which the Petitioner has already finalized the WP and LT O&M Agreements, i.e., 13 years. During this time, however, the 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.)."

100. The petitioner in its COD adjustment application has claimed local O&M of PKR 0.5830/kWh and foreign O&M of PKR 0.6773/kWh. 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

8

1 7



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	0.6773	0.6777
Indexation values:			
CPI (General) / N-CPI	229.27	157.46	158.18
PKR/USD exchange rate	120	177.3	177.95
US-CPI	252.146	278.80	277.95

- For the purpose of calculation of approved numbers; N-CPI, US CPI for month of Nov, 2021 has been used. The exchange rate of Dec 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 N-CPI. The reference generation tariff was determined on CPI (General). Accordingly, the CPI of August 2018 i.e., 229.27 was revised with the equivalent N-CPI of May 2020 i.e., 131.01. Subsequently the same was indexed with N-CPI of November 2021.

Insurance during operation:

101. The Tariff Determination provide following provision with regard adjustment of 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..."

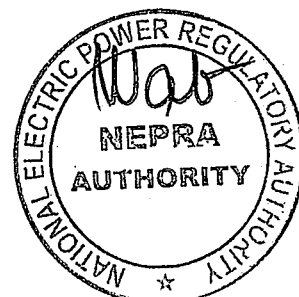
102. AWPL has not submitted documentary evidence of operational insurance. It is noted that in the Tariff Determination, reference insurance component has been calculated considering 0.4% of the allowed EPC cost USD 57.04 million which works out USD 0.23 million per annum. Based on same mechanism, the insurance component has been adjusted/revised at COD and is being allowed as PKR 0.2439/kWh. The adjustment mechanism of operational insurance is given in order part of this decision.

103. 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 ACT 2 DIN Wind (Pvt) Ltd. ("AWPL") (formerly Act 2 Wind Power (Pvt.) Limited) for its 50 MW wind power project for delivery of electricity to the power purchaser:

- Levelized tariff works out as Rs. 7.7333/kWh and US Cents 4.3458/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 80.04:19.96 has been approved.

8



- Debt Repayment period of 10 years has been taken into account for local financing under SBP Scheme.
- Debt Repayment period of 13 years has been taken into account for foreign financing.
- The cost of financing of debt of 5.4% (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 RCOD of December 31, 2021 (excluding OFME period of 237 days).
- Insurance during operation has been calculated at 0.4% of the allowed EPC cost.
- Reference Exchange Rate 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

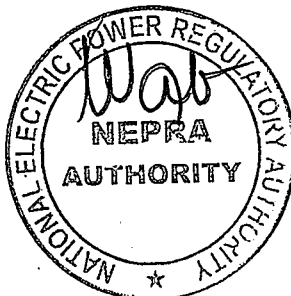
Adjustment of O&M, return on equity, return on equity during construction shall be made on quarterly basis for the quarters starting from 1st January, 1st April, 1st July and 1st October, based on latest available information. Adjustment of debt servicing components, where applicable, shall also be made on quarterly basis. Insurance component shall be adjusted on annual basis starting from either 1st January or 1st July. 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 is 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
US CPI _(REF)	=	The reference US CPI (All Urban Consumers) of 277.95 of November, 2021

8





$N-CPI_{(REV)}$	=	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 (US\$ 57.039) 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.

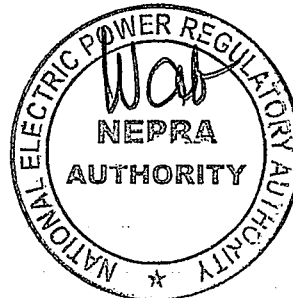
iii) Return on Equity

The total ROE (ROE + ROEDC) component of the tariff will be adjusted on quarterly basis 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 PKR 177.95/USD of December 31, 2021

8

M J



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/SOFR according to the following formula:

ΔI	=	$P (REV) * (LIBOR (REV) - 0.2091\%) / 4$
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 < 0.2091%. 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.).

8 17 9



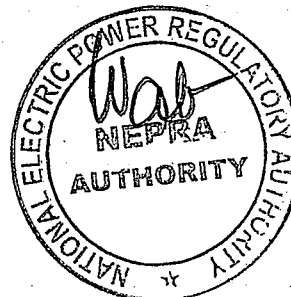


- This tariff will be limited to the extent of net annual energy generation supplied to the power purchaser up to 38% net annual plant capacity factor. Net annual energy generation supplied to the power purchaser in a year, in excess of 38% net annual plant capacity factor will be charged at the following 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 factors.
- In the tabulated above 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 passed through.
- 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.
- For advance against equity, AWPL to ensure compliance with the submission of SECP Form-3 on or before June 30, 2026 and submit the same to the NEPRA.
- The quarterly 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.

8 2 7

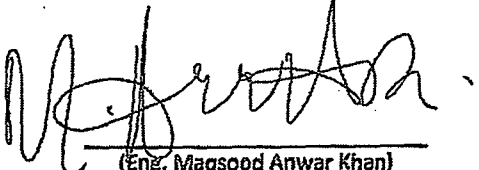


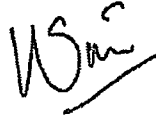


104. The instant decision along with attached three Annexures, is intimated to the Federal Government, prior to its notification in the official Gazette as per Section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.

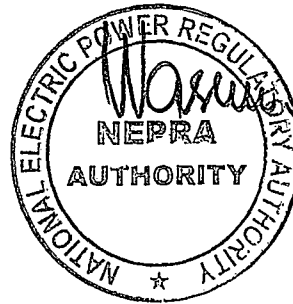
AUTHORITY


(Amina Ahmed)
Member


(Eng. Maqsood Anwar Khan)
Member



(Waseem Mukhtar)
Chairman



ACT 2 DIN WIND (PVT.) LIMITED

Revised Tariff PKR/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	0.2439	1.7437	0.1944	1.3167	1.1573	2.4713	1.2845	9.6752
2	0.5856	0.6777	0.2439	1.7437	0.1944	1.4093	1.0971	2.4713	1.1510	9.5740
3	0.5856	0.6777	0.2439	1.7437	0.1944	1.5071	1.0326	2.4713	1.0176	9.4740
4	0.5856	0.6777	0.2439	1.7437	0.1944	1.6102	0.9637	2.4713	0.8841	9.3747
5	0.5856	0.6777	0.2439	1.7437	0.1944	1.7239	0.8900	2.4713	0.7507	9.2813
6	0.5856	0.6777	0.2439	1.7437	0.1944	1.8455	0.8111	2.4713	0.6172	9.1906
7	0.5856	0.6777	0.2439	1.7437	0.1944	1.9724	0.7267	2.4713	0.4838	9.0996
8	0.5856	0.6777	0.2439	1.7437	0.1944	2.1073	0.6366	2.4713	0.3503	9.0109
9	0.5856	0.6777	0.2439	1.7437	0.1944	2.2553	0.5402	2.4713	0.2169	8.9291
10	0.5856	0.6777	0.2439	1.7437	0.1944	2.4113	0.4371	2.4713	0.0834	8.8485
11	0.5856	0.6777	0.2439	1.7437	0.1944	2.5805	0.3267	-	-	6.3527
12	0.5856	0.6777	0.2439	1.7437	0.1944	2.7577	0.2087	-	-	6.4118
13	0.5856	0.6777	0.2439	1.7437	0.1944	2.9428	0.0826	-	-	6.4708
14	0.5856	0.6777	0.2439	1.7437	0.1944	-	-	-	-	3.4454
15	0.5856	0.6777	0.2439	1.7437	0.1944	-	-	-	-	3.4454
16	0.5856	0.6777	0.2439	1.7437	0.1944	-	-	-	-	3.4454
17	0.5856	0.6777	0.2439	1.7437	0.1944	-	-	-	-	3.4454
18	0.5856	0.6777	0.2439	1.7437	0.1944	-	-	-	-	3.4454
19	0.5856	0.6777	0.2439	1.7437	0.1944	-	-	-	-	3.4454
20	0.5856	0.6777	0.2439	1.7437	0.1944	-	-	-	-	3.4454
21	0.5856	0.6777	0.2439	1.7437	0.1944	-	-	-	-	3.4454
22	0.5856	0.6777	0.2439	1.7437	0.1944	-	-	-	-	3.4454
23	0.5856	0.6777	0.2439	1.7437	0.1944	-	-	-	-	3.4454
24	0.5856	0.6777	0.2439	1.7437	0.1944	-	-	-	-	3.4454
25	0.5856	0.6777	0.2439	1.7437	0.1944	-	-	-	-	3.4454
Levelized Tariff	0.5856	0.6777	0.2439	1.7437	0.1944	1.4567	0.6253	1.6729	0.5329	7.7333

Levelized Tariff in US Cents 4.3458/kWh

S 19

ACT 2 DIN WIND (PVT.) LIMITED

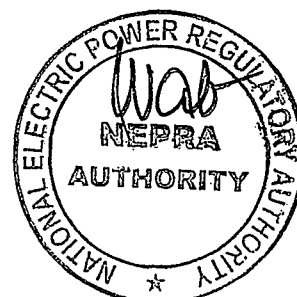
Debt Repayment Plan - SBP Refinance

SBP refinance rate	3.00%	p.a
Spread	2.40%	p.a
All-in Rate	5.40%	p.a

Period	PKR			PKR/kWh	
	Outstanding	Principal	Interest	Principal	Interest
1	4,113,230,000	102,830,750	55,528,605	-	-
2	4,010,399,250	102,830,750	54,140,390	-	-
3	3,907,568,500	102,830,750	52,752,175	-	-
4	3,804,737,750	102,830,750	51,363,960	2.4713	1.2845
5	3,701,907,000	102,830,750	49,975,745	-	-
6	3,599,076,250	102,830,750	48,587,529	-	-
7	3,496,245,500	102,830,750	47,199,314	-	-
8	3,393,414,750	102,830,750	45,811,099	2.4713	1.1510
9	3,290,584,000	102,830,750	44,422,884	-	-
10	3,187,753,250	102,830,750	43,034,669	-	-
11	3,084,922,500	102,830,750	41,646,454	-	-
12	2,982,091,750	102,830,750	40,258,239	2.4713	1.0176
13	2,879,261,000	102,830,750	38,870,024	-	-
14	2,776,430,250	102,830,750	37,481,808	-	-
15	2,673,599,500	102,830,750	36,093,593	-	-
16	2,570,768,750	102,830,750	34,705,378	2.4713	0.8841
17	2,467,938,000	102,830,750	33,317,163	-	-
18	2,365,107,250	102,830,750	31,928,948	-	-
19	2,262,276,500	102,830,750	30,540,733	-	-
20	2,159,445,750	102,830,750	29,152,518	2.4713	0.7507
21	2,056,615,000	102,830,750	27,764,303	-	-
22	1,953,784,250	102,830,750	26,376,087	-	-
23	1,850,953,500	102,830,750	24,987,872	-	-
24	1,748,122,750	102,830,750	23,599,657	2.4713	0.6172
25	1,645,292,000	102,830,750	22,211,442	-	-
26	1,542,461,250	102,830,750	20,823,227	-	-
27	1,439,630,500	102,830,750	19,435,012	-	-
28	1,336,799,750	102,830,750	18,046,797	2.4713	0.4838
29	1,233,969,000	102,830,750	16,658,582	-	-
30	1,131,138,250	102,830,750	15,270,366	-	-
31	1,028,307,500	102,830,750	13,882,151	-	-
32	925,476,750	102,830,750	12,493,936	2.4713	0.3503
33	822,646,000	102,830,750	11,105,721	-	-
34	719,815,250	102,830,750	9,717,506	-	-
35	616,984,500	102,830,750	8,329,291	-	-
36	514,153,750	102,830,750	6,941,076	2.4713	0.2169
37	411,323,000	102,830,750	5,552,860	-	-
38	308,492,250	102,830,750	4,164,645	-	-
39	205,661,500	102,830,750	2,776,430	-	-
40	102,830,750	102,830,750	1,388,215	2.4713	0.0834

S

M 7



ACT 2 DIN WIND (PVT.) LIMITED

Debt Repayment Plan -Foreign Financing

LIBOR	0.2091%	p.a
Spread	4.25%	p.a
All-in Rate	4.46%	p.a

Period	USD				PKR/kWh	
	Outstanding	Repayment percentage	Principal	Interest	Principal	Interest
1	24,729,852	1.21%	299,231	275,684	-	-
2	24,430,621	1.23%	304,177	272,348	-	-
3	24,126,444	1.26%	311,596	268,957	-	-
4	23,814,848	1.28%	316,542	265,484	1.3167	1.1573
5	23,498,306	1.30%	321,488	261,955	-	-
6	23,176,818	1.32%	326,434	258,371	-	-
7	22,850,384	1.34%	331,380	254,732	-	-
8	22,519,004	1.37%	338,799	251,038	1.4093	1.0971
9	22,180,205	1.39%	343,745	247,261	-	-
10	21,836,460	1.41%	348,691	243,429	-	-
11	21,487,769	1.44%	356,110	239,542	-	-
12	21,131,659	1.46%	361,056	235,572	1.5071	1.0326
13	20,770,603	1.48%	366,002	231,547	-	-
14	20,404,601	1.51%	373,421	227,467	-	-
15	20,031,180	1.54%	380,840	223,304	-	-
16	19,650,341	1.56%	385,786	219,059	1.6102	0.9637
17	19,264,555	1.59%	393,205	214,758	-	-
18	18,871,350	1.62%	400,624	210,375	-	-
19	18,470,727	1.64%	405,570	205,908	-	-
20	18,065,157	1.67%	412,989	201,387	1.7239	0.8900
21	17,652,169	1.70%	420,407	196,783	-	-
22	17,231,761	1.73%	427,826	192,097	-	-
23	16,803,935	1.76%	435,245	187,327	-	-
24	16,368,689	1.79%	442,664	182,475	1.8455	0.8111
25	15,926,025	1.82%	450,083	177,541	-	-
26	15,475,942	1.85%	457,502	172,523	-	-
27	15,018,439	1.88%	464,921	167,423	-	-
28	14,553,518	1.91%	472,340	162,240	1.9724	0.7267
29	14,081,178	1.94%	479,759	156,975	-	-
30	13,601,419	1.98%	489,651	151,626	-	-
31	13,111,768	2.01%	497,070	146,168	-	-
32	12,614,698	2.04%	504,489	140,626	2.1073	0.6366
33	12,110,209	2.08%	514,381	135,002	-	-
34	11,595,828	2.11%	521,800	129,268	-	-
35	11,074,028	2.15%	531,692	123,451	-	-
36	10,542,336	2.19%	541,584	117,524	2.2553	0.5402
37	10,000,752	2.22%	549,003	111,487	-	-
38	9,451,750	2.26%	558,895	105,366	-	-
39	8,892,855	2.30%	568,787	99,136	-	-
40	8,324,068	2.34%	578,679	92,795	2.4113	0.4371
41	7,745,390	2.38%	588,570	86,344	-	-
42	7,156,819	2.42%	598,462	79,783	-	-
43	6,558,357	2.46%	608,354	73,111	-	-
44	5,950,002	2.50%	618,246	66,330	2.5805	0.3267
45	5,331,756	2.54%	628,138	59,437	-	-
46	4,703,618	2.59%	640,503	52,435	-	-
47	4,063,115	2.63%	650,395	45,295	-	-
48	3,412,720	2.67%	660,287	38,044	2.7577	0.2087
49	2,752,433	2.72%	672,652	30,684	-	-
50	2,079,781	2.77%	685,017	23,185	-	-
51	1,394,764	2.81%	694,909	15,549	-	-
52	699,855	2.83%	699,855	7,802	2.9428	0.0826

879

