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National Electric Power Regulatory Authority

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No. NEPRA/R/ADG(Trf)/TRF-488/DEL-2019/14-18

January 05, 2026

Subject: Decision of the National Electric Power Regulatory Authority in the matter of Tariff Adjustment at Commercial Operations Date of Din Energy Limited

Dear Sir,

Please find enclosed herewith the subject Decision of the Authority alongwith Annex-I, II & III (total 32 pages) regarding tariff Adjustment at Commercial Operations Date of Din Energy Limited in Case No. NEPRA/ TRF-488/DEL-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, Din Energy Ltd. Din House, 35-A/1, Lalazar Area, Opposite Beach Luxury Hotel, Karachi

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

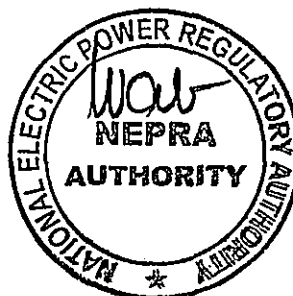
Introduction:

1. Din Energy Limited ("DEL" or "the petitioner" or "the company") is a private limited company incorporated for the purpose of developing a 50 MW wind power project ("the Project"). The National Electric Power Regulatory Authority ("NEPRA" or "the Authority") granted a Generation License to the company on February 1, 2017 which was subsequently modified vide Authority's decision dated January 1, 2020.
2. The Authority determined the tariff of DEL vide its decision dated November 19, 2018 wherein a levelized tariff of PKR 5.7388/kWh (US Cents 4.7824/kWh) was approved. Thereafter, the Authority decided the tariff modification petition filed by DEL vide its decision on July 23, 2020. Subsequently, the Authority also issued dated May 17, 2021 on the motion for leave for review filed by DEL against the tariff modification decision.
3. For the sake of brevity and convenience, the aforesaid decisions, whether referred collectively or individually shall hereinafter be referred to as "Tariff Determination", unless the context requires otherwise.

Adjustment of Tariff at Commercial Operations Date

4. The 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, subject to the approved amount as the maximum limit. The 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 to submit M/s DNV-GL certification No. TC-236603-A-2 date May 29, 2015 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.

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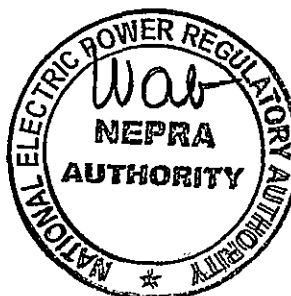


- IDC will be recomputed at COD on the basis of actual timing of debt draw downs (for the overall debt allowed by the Authority at COD) for the project construction period of fifteen months allowed by the Authority. For full/part of conventional local or foreign loans or a mix of both, if availed by the company, the IDC shall also be allowed adjustment for change in applicable KIBOR/LIBOR.
 - 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.
5. The Authority vide its tariff review decision dated on May 17, 2021, revised the tariff adjustment mechanism with respect to O&M component of tariff which was approved by the Authority is reproduced below:
- The O&M cost, its mix, and the corresponding mechanism thereof as approved in the Tariff Determination of DEL 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

6. DEL submitted that the company has successfully achieved COD with effect from March 27, 2022 at 00:00 Hrs. In this regard thereof, DEL has furnished the Notification of COD Complex issued by Central Power Purchasing Agency (Guarantee) Ltd. ("CPPA-G") vide letter No.DGMT(R)/MT(B&W)/DEL/6375-87 dated April 7, 2022.

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7. Subsequently, the company vide letter No. DEL/OUT/NEPRA/2022-456 dated December 23, 2022 submitted its application for adjustment/true-up of tariff at COD with supporting documents. The Company requested to adjustment / true-up the relevant tariff components in line with the parameters and mechanism prescribed in the tariff Determination.
8. It was noted that the information submitted by DEL along with its tariff adjustment application was incomplete. Consequently, the company was required on multiple occasion, to furnish the requisite information through emails and telephonic communications. DEL submitted the information in bits and pieces. Subsequently, DEL also submitted addendums in support of its COD adjustment request. DEL also submitted an Undertaking for Correctness of Information dated January 29, 2024, affirming that all information and data provided were accurate and that nothing had been concealed or misstated. The last information in the matter has been received in November 2025.
9. Presented below is a summary of project cost allowed by the Authority in the Tariff Determination and as claimed by DEL in its tariff adjustment application dated December 23, 2022, along with subsequent addendums(s) submitted by the company :

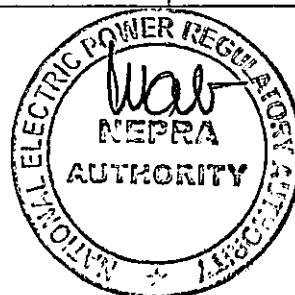
Project Cost Heads	Determined		Revised Claimed at COD	
	USD Million	PKR Million	USD Million	PKR Million
EPC Cost	57.94	6,952.80	57.94	10,271.98
EPC Contractor Claims	-	-	5.63	1,026.68
Duties and Taxes	-	-	0.58	96.37
Project Development Cost	2.50	300.00	2.64	390.64
Insurance during construction	0.29	34.80	0.30	48.54
Financing Fee and Charges	1.22	145.80	1.73	283.19
Interest during Construction	1.96	235.32	1.57	275.32
Interest Income	-	-	(0.03)	(4.70)
Total Project Cost	63.91	7,668.72	70.36	12,388.03

Audit of Project Cost:

10. DEL submitted Audit Report of Naveed Zafar Ashfaq Jaffery & Co. dated February 24, 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	57.94	10,009.21
Duties and Taxes	0.58	96.37
Project Development Cost and Non-EPC cost	2.64	390.64
Insurance during construction	0.30	48.54

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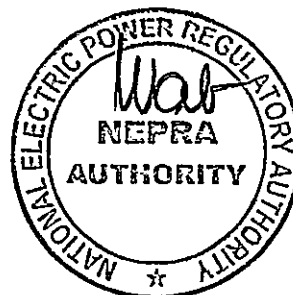


Financing Fee and Charges	1.73	283.19
Interest during Construction	1.57	275.32
Total Project Cost	64.76	11,103.28

Force Majeure and Construction Period:

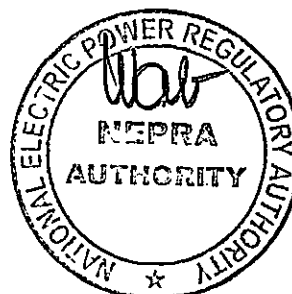
11. The Tariff Determination stipulated that the *"the targeted maximum construction period after financial close is fifteen months. No adjustment will be allowed in this tariff to account for financial impact of any delay in project construction. However, the failure of the company to complete construction within fifteen months will not invalidate the tariff granted to it."*
12. In its tariff adjustment application and during subsequent proceedings, DEL submitted that following the issuance of the Tariff Determination, it obtained the Letter of Support ("LOS") from the Alternative Energy Development Board ("AEDB") on November 08, 2019, executed the Energy Purchase Agreement ("EPA") with CPPA-G on November 11, 2019, and signed the Implementation Agreement ("IA") with the Government of Pakistan on November 12, 2019. Consequently, DEL achieved Financial Close on November 18, 2019. As per the EPA, the Required Commercial Operations Date ("RCOD") was defined as fifteen (15) months from the construction start date, which in the instant case fell on October 21, 2021. However, DEL achieved COD on March 27, 2022.
13. DEL requested approval of an extended construction period of approximately twenty (20) months, commencing from the construction start date of July 21, 2020 until actual COD on March 27, 2022, as against the construction period fifteen (15) months allowed under the Tariff Determination. As per the petitioner the delay was due to COVID-19 pandemic and completion of purchaser interconnection facility.
14. In support of its claim, DEL submitted that Covid-19 pandemic widespread disruption to businesses including impacts on labour availability, supply chains, movement of goods and personnel, equipment delivery, testing schedules, and worker health and safety. DEL further stated that the purchaser's obligations relating to completion of interconnection facilities were adversely affected. In this regard, National Transmission and Despatch Company Limited ("NTDCL now NGC") issued FME notices to CPPA-G on February 6, 2020 and March 17, 2020. Subsequently, CPPA-G on March 25, 2020 acknowledged the COVID-19 delays as an FME. CPPAG vide letter dated March 27, 2020 issued a notice of Other Force Majeure Event ("OFME") to DEL due to a complete halt of purchaser interconnection works. CPPA-G later issued a cessation notice dated October 26, 2020, declaring that the OFME had ceased with effect from September 30, 2020 and that interconnection works recommenced on October 01, 2020.
15. DEL submitted that the OFME period applicable to the purchaser's interconnection works extended from February 06, 2020 to September 30, 2020, for 237 days. As per the EPA, the purchaser's interconnection readiness date was August 31, 2021; however, due to non-availability of interconnection facilities, RCOD was delayed until February 18, 2022. DEL claimed that the cumulative impact of COVID-19 and interconnection delays resulted in a overall delay of 408 days. In support, DEL submitted a Certificate of Readiness for Energization issued by the Independent Engineer on January 30, 2022 during the processing.

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16. In justification of its extended period claims, DEL referred the Authority's tariff modification decision of Matiari Lahore Transmission Company (Pvt.) Ltd. ("PMLTCPL") dated September 02, 2021, COD decision of Uch-II Power (Pvt.) Ltd. dated July 3, 2017 and Sapphire Electric Company Ltd ("SECL") review motion decision dated November 23, 2012. Keeping in view aforesaid facts, DEL requested to allow extension in RCOD and associated costs up to COD.
17. The Authority has noted that the EPA contain a dedicated chapter on FME, categorizing them into (i) CLFME (ii) PPFME and (iii) OFME. The Authority observes that compensation for construction delays is only provided under CLFME and PPFME. In case of OFME, while contractual timelines may be extended on a day-for-day basis in accordance with Section 6.5(a) of the EPA, no financial compensation is provided.
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 and 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, considering the comments of the power purchaser and AEDB the Authority decided to not allow the additional cost on account of OFME/extension in RCOD. 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.
19. With regard to the interconnection facilities, the Authority observed that Section 6.5(a) of the EPA obligates the Purchaser to complete the interconnection works and conduct all requisite testing within the prescribed timelines. Section 6.5 further provides that the Seller shall not be entitled to claim any costs, including carrying costs, for delays attributable to the Purchaser in completing the Power Interconnection Facilities (PIFs). The EPA represents mutually agreed rights and obligations of the Power Producer and the Power Purchaser, including the imposition of liquidated damages (LDs) for failure to achieve agreed milestones. In this context, the Authority noted that CPPA-G imposed LDs on the power producer on account of delay in issuance of certificate of readiness. In view of the foregoing facts and established precedents, the Authority finds the instant request of DEL is not justified.
20. The Authority has noted that Tariff Determination provided 15 months construction period after financial close to DEL. CPPA-G declared cessation of OFME of DEL 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. In view of the foregoing, , the Authority has decided to disallow Interest during Construction ("IDC") and Return on Equity during Construction ("ROEDC") for the OFME period from February 06, 2020 to September 30, 2020, as no compensation is provided for such events under the EPA. Accordingly, the Authority has decided to allow IDC and ROEDC for the construction period of 15 months from October 01, 2020 till revised RCOD of December 31, 2021 for the purpose of calculations of IDC and ROEDC.

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Adjustment of Engineering Procurement and Construction (EPC) Cost:

22. The Authority in the Tariff Determination allowed Engineering Procurement and Construction ("EPC") cost of USD 57.94 million to DEL 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."

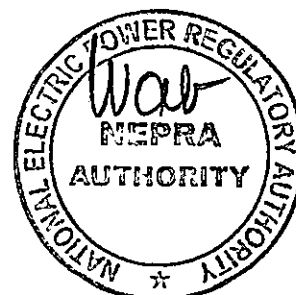
23. In its COD adjustment application, DEL claimed EPC cost of USD 57.94 million (PKR 10,009.21 million) which was subsequently revised through the submission of addendums. The breakup of the claimed EPC cost as approved in the Tariff Determination, revised claimed by DEL and as verified through Audit Report is given hereunder:

Description	Claimed at COD		Revised Claimed		Audit Report	
	USD Million	PKR Million	USD Million	PKR Million	USD Million	PKR Million
Offshore EPC	45.94	7,998.61	45.94	8,270.85	57.94	10,009.21
Onshore EPC	12.00	2,010.60	12.00	2,001.14		
Total	57.94	10,009.21	57.94	10,271.98	57.94	10,009.21

Offshore EPC Cost:

24. In support of its claim for the offshore EPC cost, the Petitioner submitted copy of the Offshore Supply Contract dated October 15, 2019 executed with M/s Hangzhou Huachen Electric Power Control Company Limited ("HEPCCL") for an amount of USD 45.94 million along with subsequent amendments thereto. The petitioner also provided copies of commercial invoices, SWIFT payment messages, relevant bank statements and National Bank of Pakistan ("NBP") exchange rate sheets. Furthermore, milestone completion certificates issued by the Lenders' Technical Advisor / Owner's Engineer, i.e., DNV GL and import-related documents such as Commercial Invoices, Certificates of Origin, Goods Declarations ("GD") and Bills of Lading ("BL"), were submitted for verification.
25. The petitioner also furnished a Certificate of Compliance issued by HEPCCL dated December 10, 2022, confirming that the wind turbines installed at the project site are of the same design, specifications, and country of origin as certified under M/s DNV-GL Certification No. TC-236603-A-3 dated July 01, 2015.

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26. 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 sheet (for payments made from United National Bank Limited - United Kingdom) 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 NBP exchange rate as of date of COD petition (i.e. December 20, 2022) for the Equipment Supply Contract.
27. The Authority noted that under the Offshore Supply Contract, a total price of USD 45.94 million was mutually agreed between the parties, along with a milestone-based payment schedule. As per the said schedule, the cost attributable to equipment supply under various milestones amounts to USD 40.43 million, whereas the remaining amount of USD 5.51 million pertains to completion of the Reliability Run Tests of the Complex and issuance of the Taking-Over Certificate.
28. It is noted that the petitioner made payments towards offshore EPC costs from two bank accounts, namely USD currency account maintained with United Bank Limited - United Kingdom, and PKR proceeds account with Meezan Bank Limited. For these payments, the petitioner applied exchange rates prevailing on the respective payment dates, as obtained from the NBP website, for computation of the corresponding PKR amounts or vice versa.
29. Based on the above, the comparison of offshore EPC cost as claimed by DEL, verified by Auditors and allowed by the Authority, is given below:

Revised Claimed by DEL		Verified by Auditors	Approved	
USD Million	PKR Million		USD Million	PKR Million
45.94	8,270.85	Note	45.94	7,757.99

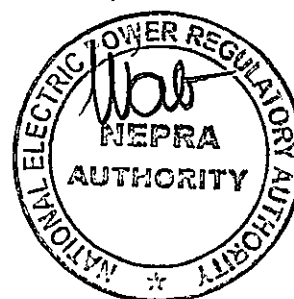
Note: The Auditors verified total EPC cost without bifurcating the offshore and onshore EPC cost.

30. The reason of difference of PKR 512.85 million between the costs claimed by DEL and approved is due to the exchange rate variation - for the payments made after revised RCOD, the NBP 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 October 15, 2019 executed with Hydrochina International Engineering Company Limited Pakistan ("HIECL") for USD 12.00 million and subsequent amendments thereon. In addition, DEL also submitted copies of sales tax invoices, withdrawal request, pay orders, real-time gross settlement ("RTGS") message, relevant bank statements, State Bank of Pakistan ("SBP") weighted average customer exchange rates sheets, Withholding Tax ("WHT") Computerized Payment Receipts ("CPR") and milestone completion certificate issued

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by Owner's Engineers namely Renewable Resources (Pvt.) Ltd. and Tractebel Engineering GmbH where applicable and Lenders' Technical Advisor's Cost Certificate namely DNV GL DNV GL. etc. for verification.

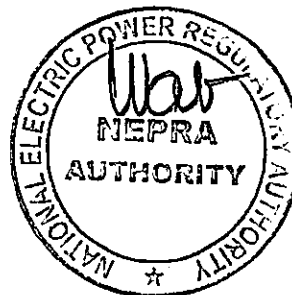
32. The Audit Report provides that the schedule of costs, as prepared by management of the company, with respect to EPC onshore was obtained. Then the amounts paid and other details appearing therein were matched with respect to the invoice date, invoice amount, payment date with copy of vendor invoice, 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 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. The Authority has noted that under the onshore EPC contract, a total contract price of USD 12 million was agreed between the parties along with a milestone-based payment schedule. It was further noted that DEL made payments against the onshore EPC contract through its Meezan Bank Limited PKR proceeds account.
34. As per the terms of the onshore EPC contract, 50% of the contract price was to be converted into equivalent PKR at the exchange rate prevailing on the date of issuance of Notice to Proceed ("NTP"), i.e. PKR.168.0958/USD as of July 21, 2020, while the remaining 50% being converted into equivalent PKR at the exchange rate applicable on the date of payment, based on the SBP weighted average exchange rate (sell side). The Authority observed that DEL applied the SBP weighted average exchange rate (sell side) as of the invoice date instead of the payment date for conversion of the later 50%.
35. Accordingly, after review and verification of the submitted documents, the comparison of onshore EPC cost, as claimed by DEL, verified by the Auditors and allowed by the Authority are as under:

Revised Claimed by DEL		Verified by Auditors	Approved	
USD Million	PKR Million		USD Million	PKR Million
12.00	2,001.14	Note	12.00	1,992.70

Note: The Auditors verified total EPC cost without bifurcating the offshore and onshore EPC cost.

36. The difference of PKR 8.44 million between the EPC onshore costs claimed by the petitioner and the amount allowed is due to that (i) PKR 3.14 million pertains to invoice no. DIN-03-Preliminary Payment 3 dated May 28, 2020 which in accordance with clause 14.1A(ba) of construction contract was required to raise on May 30, 2020. As the invoice was already raised and paid on PKR/USD exchange rate applicable on the invoice date therefore this differential claim has not been considered. (ii) PKR 5.30 million related to the invoices raised after RCOD i.e. December 31, 2021. For these invoices, DEL used the exchange rate prevailing on the respective invoice dates (to the extent of 50%). However, for the payment of the said amount,

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the SBP weighted average customer exchange rates of RCOD (December 31, 2021), i.e. PKR 176.7305/USD (on 50% of the amount) has been used.

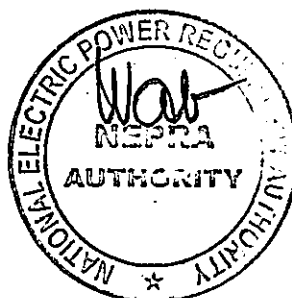
EPC Contractor Claims:

37. DEL has claimed USD 5.63 million (PKR 1,026.68 million) on account of EPC contractor claim 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 DEL as provided hereunder:

Description	USD Million	PKR Million
Additional cost claimed under equipment supply contract	0.98	178.21
Additional cost claimed under construction contract	2.96	539.60
Additional logistic cost claimed under FME	1.70	308.87
Total	5.63	1,026.68

38. In support of its claim, DEL submitted detailed summary of each cost item in the COD adjustment request. The claimed cost are related to additional payment by EPC Contractor on account of international travelling, OEM personnel cost at site, exchange losses, port charges, anti covid-19 cost, local hindrance cost, delay in approval of design & drawing, delay in strong wind speed, project catching-up activities, extension is advance payment guarantee and extra shipping cost, etc. due to covid-19 pandemic.
39. Upon scrutiny, it revealed that the claimed amount are not supported with copy of invoice and payment evidences etc. Similarly, the Audit report submitted by DEL also not account for the EPC contractor claim in the verified project cost. With regard to LDs, DEL responded that as per timelines stated in EPA, no LDs could be recovered from EPC Contractor.
40. The Authority observed that allowed EPC cost to DEL was fixed in tariff determination with only exchange rate variation on foreign portion. No upward revision of EPC cost was allowed in the Tariff Determination. The Authority further observed that there was no adjustment mechanism given on this account in the Tariff Determination at the time of COD. Accordingly, the claim of DEL being not in purview of COD adjustment has been declined.
41. Below is the comparison of total EPC cost claimed by DEL, verified by Auditors and allowed by the Authority:

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EPC	Revised Claimed		Verified by Auditors		Allowed	
	USD	PKR	USD	PKR	USD	PKR
	Million					
Offshore	45.94	8,270.85	57.94	10,009.21	45.94	7,757.99
Onshore	12.00	2,001.14			12.00	1,992.70
Total	57.94	10,271.98	57.94	10,009.21	57.94	9,750.69

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:

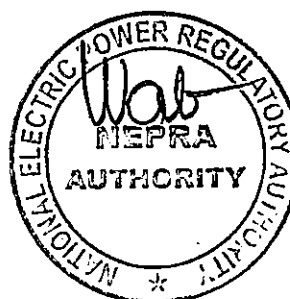
"Duties and/or taxes, not being of refundable nature, relating to the construction period directly imposed on the company up to COD will be allowed at actual upon production of verifiable documentary evidence to the satisfaction of the Authority."

43. DEL in its COD tariff application has requested for the duties and taxes of USD 0.58 million (PKR 96.37 million). Breakup of which is given hereunder:

Description	Tariff Determination		Claimed by DEL	
	USD Million	PKR Million	USD Million	PKR Million
SIDC Cess	As per actual		0.58	96.37

44. In support of its claim with respect to the SIDC payment, DEL has submitted copies of relevant commercial invoices, Cess challan, clearing agent invoice, GDs, BLs, withdrawal request, PSID slip, bank statement, SBP exchange rate sheet, certificate of insurance, etc.
45. 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. The Auditors verified duties and taxes amounting PKR 96.37 million (USD 0.58 million)
46. Based on the submitted information, duties and taxes as claimed by DEL, verified by Auditors and allowed after review and verification by the Authority is given below:

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Description	Claimed by DEL		Verified by Auditors		Approved	
	USD Million	PKR Million	USD Million	PKR Million	USD Million	PKR Million
SIDC	0.58	96.37	0.58	96.37	0.58	95.40

47. The reason for difference in the claimed and approved amount is that cost PKR 0.97 million on account of Federal Insurance Fee and Stamp Duty are excluded from this cost head and considered under the Insurance during Construction head.

Adjustment of Project Development Cost:

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

49. As per the above mechanism, the maximum amount allowed to DEL 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 390.64 million, equivalent to about USD 2.64 million along with supporting documents.
50. 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 DEL, 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." The DEL 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.
51. The DEL 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. DEL submitted that in view of the above and the extension in RCOD, requested the Authority to allow the actual incurred cost under PDC. DEL submitted following detailed breakup of the claimed PDC:

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PDC Heads	Claimed	
	PKR	USD
	Million	
Technical and Financial Advisory Services	150.87	0.99
Grid Interconnection Study	13.32	0.09
Consultancy and Lawyer Fee	40.64	0.27
Independent Engineer and FAT Expense	20.28	0.11
NEPRA Fee	6.80	0.05
Fee and Subscription	13.44	0.09
Leasehold Land	14.66	0.14
Met Mast, Vehicles & Equipment	18.23	0.13
Salary and Other Benefit	67.50	0.46
Travelling and Site Expenses	27.98	0.20
Office, Admin and Other Expense	16.93	0.12
Total	390.64	2.64

52. The Auditor's Report provides that the company incurred PDC amounting to PKR 390.64 million (USD 2.64 million). The Audit report also provides that the schedules of costs prepared by the management were obtained and the amount paid were checked the documents as mentioned under different heads:

- 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 advisor, and bank statement and CPRs, where applicable.
- Land Lease: Copy of lease agreement, treasury challan and pay order, where applicable.
- Government Authorities: Copy of invoice/challan and cheque/pay order, where applicable.
- Fixed Assets: Copy of sale tax invoice and cheque, where applicable.
- Salaries and Benefits: Copy of salary sheet, cheque, computerized payment receipt (CPR) and bank statement where applicable.
- Travelling & Vehicle Running Expense: 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.
- The Auditor also stated that no difference was found.

53. It is pertinent to note here that 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. It is pertinent to mention that the Petitioner itself acknowledged the same in its COD adjustment application.

54. The claim submitted by DEL has been analysed considering the expenses incurred till revised RCOD. The Authority has noted that the company incurred the total cost of PKR 337.94 million till revised RCOD of December 31, 2021. The relevant documents as submitted by the company in relation to the claim of the PDC have been checked. Considering the above details,

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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 1, 2020 till December 31, 2021. Accordingly, the corresponding USD amounts works out to be about USD 1.84 million, which is being allowed.

Adjustment of Insurance during Construction

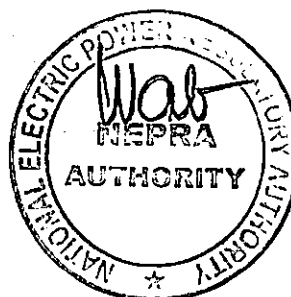
55. The Authority in the Tariff Determination allowed USD 0.29 million for insurance during construction while stating the following mechanism for its adjustment at COD:

"...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."

56. As per the above mechanism, the maximum amount allowed to DEL under captioned head @PKR 120/USD works out to be about PKR 34.80 million.
57. The petitioner in its adjustment request has claimed insurance amount of PKR 48.54 million (equivalent to about USD 0.30 million). DEL submitted that owing to around 5 month delay due to the FME, it had to extend its construction period insurance. The company informed that initially insurance for the shorter extended period of 3.5 months 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.
58. As per the details submitted by DEL, the breakup of the claimed insurance during construction for the insured period is given hereunder:

Description	Insurer	Period	Claimed Premium
			PKR (million)
Marine Cargo & Marine Delay in start up.	Adamjee Insurance Co. Ltd.	21-07-2020 to 04-02-2022	15.82
Erection All Risk, Delay in Startup, Third Party Liability (Construction) and Third Party Liability			25.87
Terrorism Insurance		21-07-2020 to 18-02-2022	3.44
Payable			3.42
Total			48.54
PKR/USD exchange rate for paid amount			161.15
PKR/USD exchange rate for payable amount			225.45
Total Premium USD			0.30

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59. 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.
60. The Auditors in their Report has also verified the amount of PKR 48.54 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.
61. Considering the FIF and stamp duty under this relevant cost head, the net insurance claimed works out to be USD 0.30 million (USD 48.51 million). The claim of the petitioner have been checked and found that the claimed amount under insurance during construction is higher than the approved maximum limit. It is noted that the petitioner also claimed payable amount of PKR 3.42 million. The said amount is not accounted for being no payment evidence is submitted.
62. Based on the above details and considering the precedent cases of MGEL and LRPL, 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 as USD 0.22 million on the basis of the average of the exchange rates prevailing on the respective payment dates and the same is being allowed.

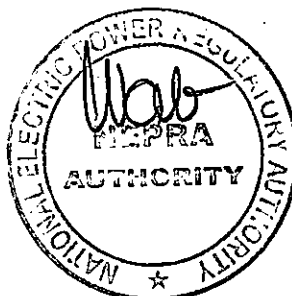
Adjustment of Financing Fee and Charges:

63. The Authority in the Tariff Determination had allowed financing fee and charges of USD 1.22 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."

64. As per the above mechanism, the maximum amount allowed to DEL under this head @ PKR 120/USD works out to be about PKR 145.80 million.
65. The petitioner in its COD adjustment application has claimed financing fee and charges amounting to PKR 283.19 million. In terms of USD, the corresponding amount of USD 1.73 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:

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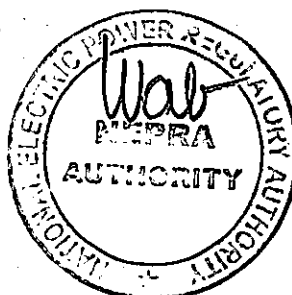
Description	Claim		Audited	
	USD	PKR	USD	PKR
	Million			
Local Financing fee	0.27	44.29	1.73	283.19
Foreign Financing fee	0.80	130.87		
Advisors Fee	0.65	108.03		
Total	1.73	283.19	1.73	283.19

66. DEL 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 International Finance Corporations ("IFC"). Accordingly, the fees and costs under foreign financing were directly linked to exchange rate fluctuations. Furthermore, the local debt assumed in the Tariff Determination is PKR 6.13 billion and Financing Fee and Charges at 2.5% of debt at PKR 145.80 million, therefore, restricting financing fee and charges at maximum of applying reference exchange rate of PKR 120 on USD values is not justified. DEL further stated that the increase in Financing Fee and Charges from allowed limit of USD 1.22 million to actual incurred USD 1.73 million is due to extended construction period and the increase should therefore be allowed.
67. The Audit Report provides that for financing fee and charges, schedule of costs prepared by management were obtained and the amount paid/payable 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 prepared by the management and converted the amount into PKR by using NBP exchange rate as on the date of true up petition (i.e. December 20, 2022).
68. DEL 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 DEL. 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 145.80 million. The corresponding USD amount has been worked out on the basis of the average of the exchange rates prevailing on the respective payment dates prior to March 27, 2022. The resultant amount works out to be about USD 0.89 million which is being allowed.

Adjustment of Debt Amount and Interest during Construction:

69. 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 adjustment application and subsequent request, DEL has

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submitted that the total project cost has been financed by the company as per the following details:

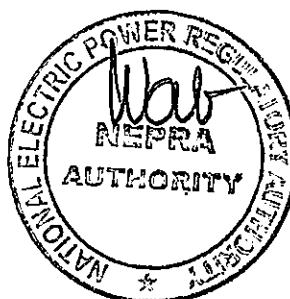
Description	PKR	USD
	Million	
Equity	2,079.20	12.87
Debt Financing:		
SBP-Local	4,234.35	25.97
Commercial-Foreign	4,361.66	25.19
Total Debt	10,675.22	64.03

70. The Tariff Determination of DEL 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 DEL 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 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 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. DEL 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, DEL had to arrange the balance debt financing in foreign currency from IFC. Stating that DEL 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 DEL:

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Source of debt	Financiers	Debt Commitment
SBP RE Scheme debt	<ul style="list-style-type: none"> Meezan Bank Limited (50%) Bank Alfalah Limited (50%) 	PKR 4,500 million
Commercial Foreign debt (LIBOR)	International Finance Corporation	USD 25.89 million

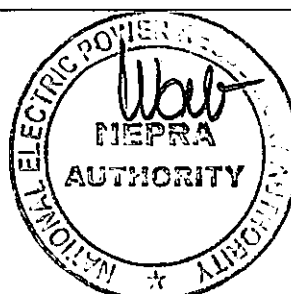
74. DEL submitted that out of total debt financing, 50% was secured in local debt (PKR) and 50% in foreign debt (USD). The amount of debt as claimed by DEL and verified by the Auditors is provided as under:

Source of debt	Claimed by DEL		Verified by Auditors	
	Amount in USD (Million)	Amount in PKR (Million)	Amount in USD (Million)	Amount in PKR (Million)
SBP RE Scheme debt-Local	25.97	4,234.35	25.97	4,234.35
Commercial Foreign debt	25.19	4,361.66	25.19	4,361.66
Total	51.16	8,596.01	51.16	8,596.01

75. 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.
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 NBP Rate Sheet, where applicable and no difference was found.
77. DEL 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 DEL 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 DEL 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	25.97	4,234.35	50.76%	<ul style="list-style-type: none"> Rate before refinancing is KIBOR+2% SBP Refinancing rate is 4.75%+0.50% saving 	10 years
Commercial Foreign loan	25.19	4,353.11	49.24%	3 month LIBOR + 4.25%	13 years
Total	51.16	8,587.46	100.00%		

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78. The detail of debt to equity ratio is as under:

Source of Funds	USD Terms	PKR Terms
Debt	79.91%	80.51%
Equity	20.09%	19.49%

79. In the Tariff Determination, the IDC of USD 1.96 million (PKR 235.32 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%, 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."

80. DEL in its COD tariff application has requested for IDC based on actual debt drawdown for the actual construction period of approximately 20 months without adjusting the interest income. Below are the details of IDC as claimed by DEL and as verified by Auditors:

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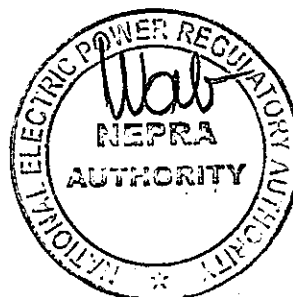
Description	Claimed by DEL		Verified by Auditors	
	USD Million	PKR Million	USD Million	PKR Million
SBP RE scheme	1.15	198.69	1.57	275.32
Commercial Foreign Loan	0.43	76.63		
Total	1.57	275.32	1.57	275.32

81. 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, swift acknowledgement, bank debit advice, LIBOR rate where applicable and financing agreements and no difference was found.
82. DEL in support of the claim has submitted copies of financing agreement, interest payment invoices, bank statement, exchange rate sheets, KIBOR rate sheet, 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. 1.25%) as a result of sharing of spread in a ratio of 60:40 (Purchaser: Producer) has also been checked and considered.
83. 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 revised RCOD i.e. December, 2021 excluding OFME period of 237 days and beyond revised RCOD and as per precedent cases is given hereunder:

IDC	Total Drawdowns	Interest Rate	Interest Amount	
			USD in million	PKR in million
Local Loan:	PKR in million			
SBP RE scheme	4,234.35	<ul style="list-style-type: none"> Rate before refinancing is KIBOR+1.75% SBP Refinancing rate is 4.75%+0.5% saving 	0.80	135.29
Foreign Loan:	USD in million		-	-
Commercial Foreign loan	24.59	<ul style="list-style-type: none"> LIBOR+4.25% 	0.18	31.24
Total Interest payment			0.98	166.53

84. The Authority has already decided to allow a 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 assessed in this report to arrive at the verified project cost.

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- 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. That amount of foreign and local debt was then sub-divided into actual percentages of the foreign and local portion.
- d. The percentage of each loan as actually disbursed till COD was applied on the verified debt amount.
- e. The IDC was then recomputed on the portion of debt amounts which is disbursed till revised COD using the actual schedule of drawdowns.

Adjustment of Interest Income

85. The petitioner has not claimed interest income in its COD adjustment request. The petitioner was directed to provide detail of interest income. Accordingly, the petitioner submitted detail of interest income amounting PKR 4.70 million (USD 0.028 million) related to the period from July 1, 2020 to March 31, 2022 along with supporting documents such as bank statement, exchange rate sheet, etc. during the processing of the case.
86. Given the fact that interest cost to the limit of 15 months from October 1, 2020 till revised RCOD (December 31, 2021) excluding OFME period and beyond revised RCOD has been allowed, therefore, the impact of interest income has also been limited to the same period, i.e. PKR 3.61 million (USD 0.02 million) as per allowed construction period i.e. October 01, 2020 to December 31, 2021.
87. Accordingly, the amount of allowed IDC, following at the above steps, worked out as under which is being approved:

Description	Approved IDC	
	USD	PKR
	Million	
SBP Loan	0.78	133.05
Commercial Foreign loan	0.18	30.49
Less: Interest income	(0.02)	(3.61)
Total	0.94	159.93

Equity:

88. The petitioner in its COD adjustment request stated that equity amount of PKR 1,968.37 million (USD 12.32 million) has been injected by the company from July 7, 2014 till revised RCOD. The Audit Report provides that the schedule of equity contribution by 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 NBP Rate Sheet, where applicable and no difference was found. The amount of equity as verified by the auditors is PKR 1,968.37 million (USD 12.32 million).

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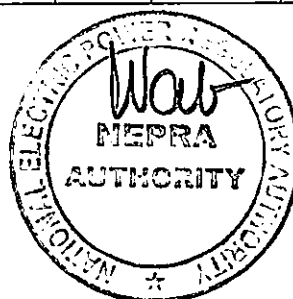
89. Subsequently, DEL submitted addendum dated April 26, 2024 wherein the equity amount has been revised to USD 12.87 million injected after revised RCOD upto August 1, 2023. Based on the review and verification of the submitted documents, the claim of DEL has been found correct. The equity in term of equivalent to USD amount comes out to be 12.87 million.
90. It was observed that the equity amount was injected before and after revised RCOD. The equity injected before construction start date has been converted at USD 166.10/PKR on first day of construction i.e. October 1, 2020. The claimed equity amount of PKR 2,079.20 million has been works out as USD 12.43 million. Further, the equity injected after revised RCOD is not account for the purpose of calculation of ROEDC.
91. It has been observed that the Company has not issued shares against the total equity received in advance. The audited financial statements for FY 2024–25, as submitted by the Company, also corroborate the same. Accordingly, DEL is hereby directed to ensure compliance by filing SECP Form-3 on or before June 30, 2026, and to submit evidence thereof to NEPRA.
92. The reference tariff has been determined on debt: equity ratio of 80:20. As per decision of the Authority 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. In the instant case the equity amount has been worked out as 20.09%. Accordingly, the same has been adjusted in line with the reference tariff.

Summary of the Project Cost

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

Description	Determined		Claimed (Revised)		Auditors		Approved	
	USD	PKR	USD	PKR	USD	PKR	USD	PKR
	Million							
Total EPC Cost	57.94	6,952.80	57.94	10,271.98	57.94	10,009.21	57.94	9,750.69
EPC Contractor Claims	-	-	5.63	1,026.68	-	-	-	-
Duties and Taxes	-	-	0.58	96.37	0.58	96.37	0.58	95.40
Project Development Cost	2.50	300.00	2.64	390.64	2.64	390.64	1.84	300.00
Insurance during construction	0.29	34.80	0.30	48.54	0.30	48.54	0.22	34.80
Financing Fee and Charges	1.22	145.80	1.73	283.19	1.73	283.19	0.89	145.80
Interest during Construction	1.96	235.32	1.57	275.32	1.57	275.32	0.96	163.55
Interest Income	-	-	(0.03)	(4.70)	-	-	(0.02)	(3.61)
Total Project Cost	63.91	7,668.72	70.36	12,388.03	64.76	11,103.28	62.40	10,486.63

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94. 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:

Loans	USD	PKR
	Million	
SBP loan	25.34	4,258.34
Foreign loan	24.58	4,130.96
Total	49.92	8,389.30

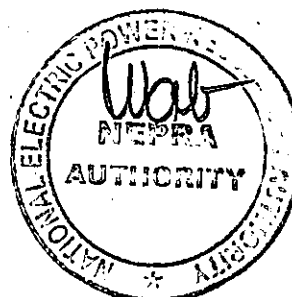
Adjustment of Equity Amount, ROE and ROEDC:

95. DEL in its COD tariff adjustment requested to allow ROEDC PKR 0.4639/kWh on the basis of equity amounting PKR 1,968.37 million (USD 12.32 million). Subsequently the equity injected amount was revised to US\$ 12.86 million.
96. The Authority observed that construction period was allowed for 15 months started from October 1, 2020 to December 31, 2021. Based on the equity injection as discussed in the preceding paragraph, the assessed ROEDC works out to be USD 2.05 million. The variance amount is due to the reason that the DEL has claimed ROEDC from July 7, 2014 till August 1, 2023 including OFME period and beyond revised RCOD whereas assessed working ROEDC is based on calculated from October 1, 2020 till revised RCOD i.e. December 31, 2021 excluding the OFME period and beyond revised RCOD.
97. Using the PMT formula, the ROEDC component works out to be PKR 0.3003/kWh (using exchange rate of PKR 177.95/USD as on December 31, 2021). The amount of annual ROE, using rate of 14%, at approved equity amount of USD 12.42 million comes out as USD 1.64 million. Accordingly, the ROE component works out to be PKR 1.7580/kWh (using exchange rate of PKR 177.95/USD as on December 31, 2021).
98. It is important to mention here that the equity IRR of 14% per annum was allowed to DEL 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 cases.
99. It is important to mention here that the equity IRR of 14% per annum was allowed to DEL 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 cases.

Operation and Maintenance ("O&M") Cost

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

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

101. 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 Din 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.

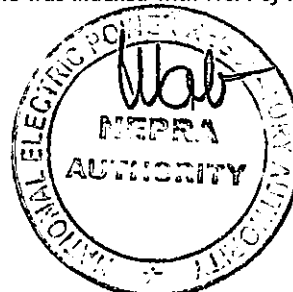
Subsequent to the lapse of the LT O&M Contract, in order to claim O&M costs, the Petitioner shall be required to carry out competitive bidding for the selection of the O&M contractor in accordance with NEPRA's applicable law. Based on this competitive bidding process, the Authority shall make revisions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

102. The petitioner in its COD adjustment application has claimed local O&M of PKR 0.5830/kWh and foreign O&M of PKR 0.6960/kWh. The tariff being approved is to be applicable for the energy supplied by the company during the quarter January-March, 2022, therefore, the O&M Cost being allowed 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:			
CPI (General) / N-CPI	229.27	157.460	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, 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.

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Insurance during operation:

103. 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..."

104. DEL 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 57.94 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 0.2478/kWh. The adjustment mechanism of operational insurance is given in order part of this decision.

105. ORDER

In pursuance of section 7(3)(a) read with Rule 3 of the NEPRA (Tariff Standards & Procedure) Rules, 1998, the Authority hereby approves the following generation tariff along with terms and conditions for Din Energy Limited ("DEL") for its 50 MW wind power project for delivery of electricity to the power purchaser:

- Levelized tariff works out to be Rs. 7.9073/kWh (US Cents 4.4436/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 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 December 31, 2021.
- 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 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 277.948 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:

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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 57.940 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 PKR 177.95/USD of December 31, 2021

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.

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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 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%

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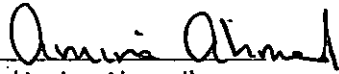
- The risk of wind resource shall be borne by the power producer.
- The company is required to maintain the availability levels as declared in the Tariff Petition and the studies provided therein. Power purchaser shall conduct detailed monitoring/audit of the operational record/log of all the wind turbines 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, DEL to ensure compliance with the submission of SECP Form-3 before June 30, 2026 and submit the same to the Authority.
- The indexation already allowed on interim basis shall not be applicable further subsequent to notification and shall be subject to adjustments, in the light of the instant decision of the Authority with respect to COD tariff adjustment.
- This decision is based on the data/information submitted by the petitioner. In case it comes to the knowledge of the Authority subsequently that any document or information submitted is incorrect, false, forged, untrue or that the petitioner has misrepresented, the Authority reserves the right to make any consequential modifications/adjustment in the tariff and appropriate action will be initiated against the petitioner in accordance with the NEPRA Act, Rules and Regulations made thereunder.

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106. 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.


AUTHORITY



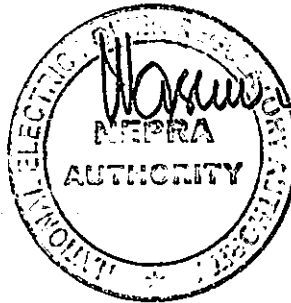
(Amina Ahmed)
Member



(Eng. Maqsood Anwar Khan)
Member



(Waseem Mukhtar)
Chairman





Din Energy Limited Tariff Table

Year	O&M-Local	O&M-Foreign	Insurance	Return on Equity	ROEDC	Foreign Loan-Principal	Foreign Loan-Interest	SBP Loan-Principal	SBP Loan-Interest	Total
	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kWh
1	0.5856	0.6777	0.2478	1.7580	0.3003	1.3088	1.1504	2.5585	1.2928	9.8800
2	0.5856	0.6777	0.2478	1.7580	0.3003	1.4008	1.0905	2.5585	1.1585	9.7777
3	0.5856	0.6777	0.2478	1.7580	0.3003	1.4981	1.0264	2.5585	1.0242	9.6766
4	0.5856	0.6777	0.2478	1.7580	0.3003	1.6006	0.9579	2.5585	0.8899	9.5763
5	0.5856	0.6777	0.2478	1.7580	0.3003	1.7136	0.8847	2.5585	0.7556	9.4817
6	0.5856	0.6777	0.2478	1.7580	0.3003	1.8345	0.8063	2.5585	0.6212	9.3899
7	0.5856	0.6777	0.2478	1.7580	0.3003	1.9606	0.7224	2.5585	0.4869	9.2978
8	0.5856	0.6777	0.2478	1.7580	0.3003	2.0947	0.6328	2.5585	0.3526	9.2079
9	0.5856	0.6777	0.2478	1.7580	0.3003	2.2419	0.5370	2.5585	0.2183	9.1249
10	0.5856	0.6777	0.2478	1.7580	0.3003	2.3969	0.4344	2.5585	0.0840	9.0432
11	0.5856	0.6777	0.2478	1.7580	0.3003	2.5651	0.3247	-	-	6.4592
12	0.5856	0.6777	0.2478	1.7580	0.3003	2.7412	0.2075	-	-	6.5181
13	0.5856	0.6777	0.2478	1.7580	0.3003	2.9252	0.0821	-	-	6.5766
14	0.5856	0.6777	0.2478	1.7580	0.3003	-	-	-	-	3.5694
15	0.5856	0.6777	0.2478	1.7580	0.3003	-	-	-	-	3.5694
16	0.5856	0.6777	0.2478	1.7580	0.3003	-	-	-	-	3.5694
17	0.5856	0.6777	0.2478	1.7580	0.3003	-	-	-	-	3.5694
18	0.5856	0.6777	0.2478	1.7580	0.3003	-	-	-	-	3.5694
19	0.5856	0.6777	0.2478	1.7580	0.3003	-	-	-	-	3.5694
20	0.5856	0.6777	0.2478	1.7580	0.3003	-	-	-	-	3.5694
21	0.5856	0.6777	0.2478	1.7580	0.3003	-	-	-	-	3.5694
22	0.5856	0.6777	0.2478	1.7580	0.3003	-	-	-	-	3.5694
23	0.5856	0.6777	0.2478	1.7580	0.3003	-	-	-	-	3.5694
24	0.5856	0.6777	0.2478	1.7580	0.3003	-	-	-	-	3.5694
25	0.5856	0.6777	0.2478	1.7580	0.3003	-	-	-	-	3.5694
Levelized Tariff Rs./kWh	0.5856	0.6777	0.2478	1.7580	0.3003	1.4480	0.6215	1.7319	0.5364	7.9073

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Din Energy Limited
Debt Servicing Schedule - SBP Loan

Period	Outstanding	Principal	Interest	Annual Principal	Annual Interest
	Rs.	Rs.	Rs.	Rs./kWh	Rs./kWh
1	4,258,341,766	106,458,544	55,890,736	-	-
2	4,151,883,222	106,458,544	54,493,467	-	-
3	4,045,424,678	106,458,544	53,096,199	-	-
4	3,938,966,134	106,458,544	51,698,931	2.5585	1.2928
5	3,832,507,590	106,458,544	50,301,662	-	-
6	3,726,049,046	106,458,544	48,904,394	-	-
7	3,619,590,501	106,458,544	47,507,125	-	-
8	3,513,131,957	106,458,544	46,109,857	2.5585	1.1585
9	3,406,673,413	106,458,544	44,712,589	-	-
10	3,300,214,869	106,458,544	43,315,320	-	-
11	3,193,756,325	106,458,544	41,918,052	-	-
12	3,087,297,781	106,458,544	40,520,783	2.5585	1.0242
13	2,980,839,236	106,458,544	39,123,515	-	-
14	2,874,380,692	106,458,544	37,726,247	-	-
15	2,767,922,148	106,458,544	36,328,978	-	-
16	2,661,463,604	106,458,544	34,931,710	2.5585	0.8899
17	2,555,005,060	106,458,544	33,534,441	-	-
18	2,448,546,516	106,458,544	32,137,173	-	-
19	2,342,087,972	106,458,544	30,739,905	-	-
20	2,235,629,427	106,458,544	29,342,636	2.5585	0.7556
21	2,129,170,883	106,458,544	27,945,368	-	-
22	2,022,712,339	106,458,544	26,548,099	-	-
23	1,916,253,795	106,458,544	25,150,831	-	-
24	1,809,795,251	106,458,544	23,753,563	2.5585	0.6212
25	1,703,336,707	106,458,544	22,356,294	-	-
26	1,596,878,162	106,458,544	20,959,026	-	-
27	1,490,419,618	106,458,544	19,561,757	-	-
28	1,383,961,074	106,458,544	18,164,489	2.5585	0.4869
29	1,277,502,530	106,458,544	16,767,221	-	-
30	1,171,043,986	106,458,544	15,369,952	-	-
31	1,064,585,442	106,458,544	13,972,684	-	-
32	958,126,897	106,458,544	12,575,416	2.5585	0.3526
33	851,668,353	106,458,544	11,178,147	-	-
34	745,209,809	106,458,544	9,780,879	-	-
35	638,751,265	106,458,544	8,383,610	-	-
36	532,292,721	106,458,544	6,986,342	2.5585	0.2183
37	425,834,177	106,458,544	5,589,074	-	-
38	319,375,632	106,458,544	4,191,805	-	-
39	212,917,088	106,458,544	2,794,537	-	-
40	106,458,544	106,458,544	1,397,268	2.5585	0.0840

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Din Energy Limited
Debt Servicing Schedule - Foreign Loan

Period	Outstanding	Repayment percentage	Principal	Interest	Annual Principal	Annual Interest
	USD	%	USD	USD	Rs./kWh	Rs./kWh
1	24,582,017	1.21%	297,442	274,036	-	-
2	24,284,574	1.23%	302,359	270,720	-	-
3	23,982,216	1.26%	309,733	267,350	-	-
4	23,672,482	1.28%	314,650	263,897	1.3088	1.1504
5	23,357,832	1.30%	319,566	260,389	-	-
6	23,038,266	1.32%	324,483	256,827	-	-
7	22,713,783	1.34%	329,399	253,209	-	-
8	22,384,384	1.37%	336,774	249,537	1.4008	1.0905
9	22,047,611	1.39%	341,690	245,783	-	-
10	21,705,921	1.41%	346,606	241,974	-	-
11	21,359,314	1.44%	353,981	238,110	-	-
12	21,005,333	1.46%	358,897	234,164	1.4981	1.0264
13	20,646,436	1.48%	363,814	230,163	-	-
14	20,282,622	1.51%	371,188	226,107	-	-
15	19,911,434	1.54%	378,563	221,969	-	-
16	19,532,871	1.56%	383,479	217,749	1.6006	0.9579
17	19,149,391	1.59%	390,854	213,474	-	-
18	18,758,537	1.62%	398,229	209,117	-	-
19	18,360,308	1.64%	403,145	204,678	-	-
20	17,957,163	1.67%	410,520	200,183	1.7136	0.8847
21	17,546,644	1.70%	417,894	195,607	-	-
22	17,128,749	1.73%	425,269	190,948	-	-
23	16,703,480	1.76%	432,643	186,207	-	-
24	16,270,837	1.79%	440,018	181,384	1.8345	0.8063
25	15,830,819	1.82%	447,393	176,479	-	-
26	15,383,426	1.85%	454,767	171,492	-	-
27	14,928,659	1.88%	462,142	166,422	-	-
28	14,466,517	1.91%	469,517	161,270	1.9606	0.7224
29	13,997,000	1.94%	476,891	156,036	-	-
30	13,520,109	1.98%	486,724	150,720	-	-
31	13,033,385	2.01%	494,099	145,294	-	-
32	12,539,287	2.04%	501,473	139,786	2.0947	0.6328
33	12,037,814	2.08%	511,306	134,195	-	-
34	11,526,508	2.11%	518,681	128,495	-	-
35	11,007,827	2.15%	528,513	122,713	-	-
36	10,479,314	2.19%	538,346	116,822	2.2419	0.5370
37	9,940,968	2.22%	545,721	110,820	-	-
38	9,395,247	2.26%	555,554	104,737	-	-
39	8,839,693	2.30%	565,386	98,543	-	-
40	8,274,307	2.34%	575,219	92,241	2.3969	0.4344
41	7,699,088	2.38%	585,052	85,828	-	-
42	7,114,036	2.42%	594,885	79,306	-	-
43	6,519,151	2.46%	604,718	72,674	-	-
44	5,914,433	2.50%	614,550	65,933	2.5651	0.3247
45	5,299,883	2.54%	624,383	59,082	-	-
46	4,675,500	2.59%	636,674	52,122	-	-
47	4,038,825	2.63%	646,507	45,024	-	-
48	3,392,318	2.67%	656,340	37,817	2.7412	0.2075
49	2,735,978	2.72%	668,631	30,500	-	-
50	2,067,348	2.77%	680,922	23,046	-	-
51	1,386,426	2.81%	690,755	15,456	-	-
52	695,671	2.83%	695,671	7,755	2.9252	0.0824

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