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No. NEPRA/TRF-590/CPPCL -2022/19349-51

July 26, 2023

Subject: **DECISION OF THE AUTHORITY IN THE MATTER OF TARIFF
MODIFICATION PETITION FILED BY CIHC PAK POWER COMPANY
(PVT) LIMITED FOR ITS 300 MW COAL FIRED POWER GENERATION
PROJECT AT GWADAR, BALOCHISTAN**

Dear Sir,

Please find enclosed herewith the subject Decision of the Authority and opinion of Mr. Rafique Ahmed Shaikh, Member NEPRA along with Annex -1 & Annex-2 (Total 33 pages) in Case No. NEPRA/TRF-590/CPPCL-2022.

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 days from the intimation of this Decision. In the event the Federal Government fails to notify the subject tariff Decision or refer the matter to the Authority for reconsideration, 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.

3. The Order of the Authority along with Annex-1 & 2 are to be notified in the official Gazette.


(Engr. Mazhar Iqbal Ranjha)

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

CC:

1. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad.
2. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad.



**DECISION OF THE AUTHORITY IN THE MATTER OF TARIFF MODIFICATION
PETITION FILED BY CIHC PAK POWER COMPANY (PVT) LIMITED FOR ITS 300
MW COAL FIRED POWER GENERATION PROJECT AT GWADAR,
BALOCHISTAN**

1. INTRODUCTION

- 1.1. CIHC Pak Power (Private) Power Company Limited (CPPCL), a private limited Company incorporated under the laws of Pakistan, is establishing a Coal based Power Project at Gwadar, Baluchistan, with a capacity of 2 x 150 MW (Gross). Generation License was granted on 13th November 2019 to CPPCL.
- 1.2. The Authority approved Generation Tariff for CPPCL vide decision dated 19th December 2018. CPPCL being aggrieved of the subject decision filed a Motion for Leave for Review (MLR) vide letter dated 29th December 2018. The MLR was decided on 31.05.2019 and the tariff was revised. The summary of the approved project cost is as under:

Description	Approved US\$ Mln
EPC Cost	321.41
CD, WHT and Sales Tax	10.87
Non EPC Costs	5.77
Land	4.73
Project Development Costs	10.50
Company and Sponsor Costs	
Insurance during Construction	2.41
O&M Mobilization	3.21
Testing & Commissioning	2.74
CAPEX	361.64
SINOSURE Fee	3.44
Financing Fees & Charges	5.79
Interest During Construction	28.57
Project Cost	399.43
EPC Cost/MW	1.07
Project Cost/MW	1.33



2. FILING OF MODIFICATION PETITION

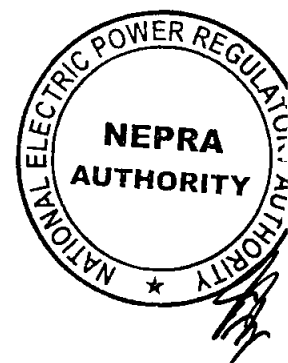
- 2.1. CPPCL vide letter dated August 25, 2022 filed tariff modification petition for 300 MW coal fired power generation project at Gwadar, Balochistan, in pursuant to Section 17(3) of NEPRA Standards and Procedure Rules 1998. Salient features of the petition are as under:
- The Petitioner requested to allow EPC cost of USD 403 million against allowed amount of USD 321 million.
 - The Petitioner requested to remove the provisions limiting the project cost indexation to a specific PKR rate i.e. 105/USD.
 - The Petitioner requested to allow actual Sinosure Fee under a Buyers Credit Insurance Policy subject to maximum of 7% of debt servicing.

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- iv. The Petitioner requested to include the financial guarantee as part of the annual recurring costs @0.9% of the guaranteed amount applicable in a particular year.
- v. The Petitioner requested the project development and sponsor's cost of USD 47.87 million against allowed amount of USD 10.50 million.
- vi. The Petitioner requested that the API-4 may be kept as the base index for the determination of coal price as outlined in the Authority's fuel pricing mechanism dated 23rd September 2016.
- vii. The Petitioner also sought clarification on taxes & duties.
- viii. The Petitioner requested to allow upward adjustment of IRR to 17% from 14%.
- ix. The Petitioner requested to allow O&M cost of USD 17.43 million against allowed amount of USD 12.71 million.

2.2. The Petitioner requested following tariff:

Description	Year	Year
	1 to 12.5	12.5 to 30
Fuel Cost Component	4.5196	4.5196
Variable O&M (foreign)	0.0662	0.0662
Variable O&M (Local)	0.0717	0.0717
Energy Purchase Price (Rs./kWh)	4.6574	4.6574
Fixed O&M (foreign)	0.4276	0.4276
Fixed O&M (Local)	0.2203	0.2203
Insurance	0.1624	0.1624
SINOSURE Fee (Average)	0.1144	0.0357
Cost of Working Capital	0.1483	0.1483
ROEDC	0.1961	0.1961
Return on Equity	0.8095	0.8095
Debt Servicing	2.1017	0.0000
Capacity Purchase Price (Rs./kW/h)	4.1804	2.0000
Capacity Purchase Price (Rs./kWh)	4.9181	2.3529
Total Tariff (Rs./kWh)	9.5755	7.0103
Levelized (Rs./kWh)	8.9182	
Levelized (US cents/kWh)	8.4935	



- 2.3. The Petitioner filed addendum dated 5th May 2023, to its Modification Petition and submitted additional information in support of the submissions within the modification Petition. The addendum was also made available on NEPRA website.
- 2.4. The Authority admitted the subject Petition on 15th September 2022. Notice of Admission was published in the newspaper on 5th October 2022 inviting comments from stakeholders. Individual notices were also sent to various stakeholder on 7th October 2022.

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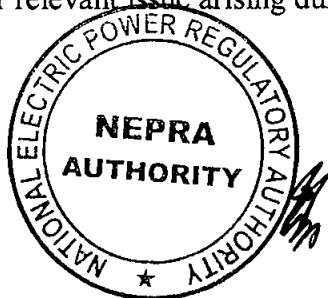
3. HEARING

- 3.1. A hearing in the matter was scheduled on December 01, 2022, however, the petitioner vide letter dated November 22, 2022 requested to postpone the hearing. Subsequently, the petitioner was repeatedly followed up to communicate its availability for hearing, however, the same was not confirmed by the petitioner. Finally upon confirmation of availability of the petitioner, the hearing was scheduled on June 07, 2023 which was once again rescheduled on the request of the petitioner and was held on June 12, 2023.

4. ISSUES OF HEARING

- 4.1. Following issues were discussed during the hearing:

- i. Whether there is justification to seek tariff on imported coal when the extension in FC by PPIB is subject to the condition that the project would be converted/shifted on local (Thar Coal).
- ii. Whether there is a justification to approve a new project on imported coal when the existing projects are being considered for conversion on local coal with additional modification costs of the existing plant and machinery.
- iii. Whether the requested EPC cost of USD 403 million against the approved cost of USD 321 million is justified?
- iv. Whether the request to remove the provisions limiting the project cost indexation to a specific PKR rate i.e. 105/USD is justified?
- v. Whether the requested Sinosure Fee at actual under a Buyers Credit Insurance subject to maximum of 7% of debt servicing is reasonable and justified?
- vi. Whether the request to include the financial guarantee as part of the annual recurring costs @0.9% of the guaranteed amount applicable in a particular year is reasonable and justified?
- vii. Whether the requested project development and sponsor's cost of USD 47.87 million against approved cost of USD 10.50 million is justified?
- viii. Whether the request to kept API-4 as the base index for the determination of coal price as outlined in the Authority's fuel pricing mechanism dated 23rd September 2016 is reasonable and justified?
- ix. Whether the request to apply taxes & duties clause of upfront tariff in the instant case is justified?
- x. Whether the request to allow upward adjustment of IRR to 17% from 14% is justified?
- xi. Whether the request allow O&M cost of USD 17.43 Million is justified?
- xii. Any other relevant issue arising during the proceedings.



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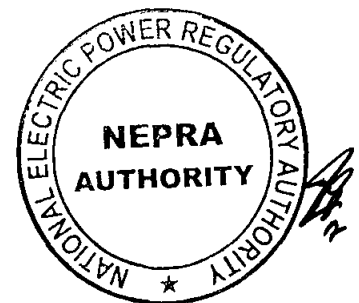
4.2. During the hearing, the petitioner was directed to provide following information, however, no information was received:

- i. Techno-commercial analysis on conversion of power plant to operate completely on Thar coal.
- ii. How much blending of Thar coal is possible on current design of the plant will there be any additional cost required for blending
- iii. Analysis on using imported Lignite coal instead of Sub Bituminous coal
- iv. Whether the petitioner will accept CPI adjustment mechanism on EPC On-Shore cost
- v. Cost comparison between Buyer's Credit Policy and Overseas Insurance Policy
- vi. Supporting documents of Additional Guarantee Cost
- vii. Justification of cost incurred in respect of Project Development Cost

5. COMMENTS FROM STAKEHOLDERS

5.1. In response to notice of admission, Pakistan Cotton Ginners Association submitted the following comments in the matter:

- In our opinion is to keep the prices of power generation as low as possible. If the power plant is coal based then it should use Thar Coal. Any local plant where dependence is on imported coal, furnace, LNG or any foreign imported fossil fuel should not be installed in Pakistan. Our country as well as our industry is suffering from high fuel prices. The effects are as follow:
 - ✓ High cost of doing business as compared to rest of the world
 - ✓ More dependence on imported fossil fuel.
 - ✓ Foreign Exchange Reserves are core issues of Pakistan's Economy.
 - ✓ Higher prices of agricultural commodities.
 - ✓ Inflation is uncontrollable.
 - ✓ Product cost is higher for local as well as foreign buyers
- We recommend government to focus on following:
 - ✓ Hydel power plant
 - ✓ Solar power plant
 - ✓ Thar coal & dependent coal plants
 - ✓ Atomic energy power plant
 - ✓ Wind energy plant
- We request government not to install following:
 - ✓ Furnace power plant
 - ✓ LNG power plant



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✓ Imported fuel dependent power plants

- We expect that government should take all measures to produce cheap energy for the future of Pakistan.

6. CONSIDERATION OF THE VIEWS OF THE PETITIONER, ANALYSIS, FINDINGS AND DECISIONS ON ISSUES

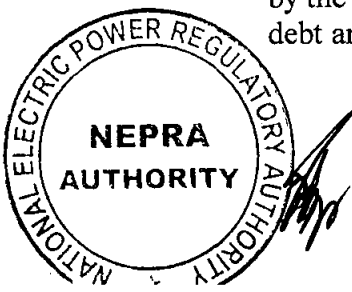
6.1. The issue wise discussion, submissions of the Petitioner, analysis, findings and decisions are provided in the succeeding paragraphs:

7. Whether there is justification to seek tariff on imported coal when the extension in FC by PPIB is subject to the condition that the project would be converted/shifted on local (Thar Coal).

Whether there is a justification to approve a new project on imported coal when the existing projects are being considered for conversion on local coal with additional modification costs of the existing plant and machinery.

7.1. The petitioner submitted following reasons for delay in Financial Close of the project:

- i. Following the issuance of the Notice to Proceed in April 2017, the project company has been engaged in the development of the above mentioned Project. After a prolonged process of nearly 4 years, PPA and IA for the Project were executed by the respective GoP agencies in April 2021 with Company, almost two (2) years later after the finalization of the tariff by the Authority in May 2019 due to COVID-19 pandemic and concerned related factors.
- ii. The company well understands that the Gwadar is the cornerstone of China Pakistan Economic Corridor (CPEC) initiative and the project itself has a critical role in the future development of the Gwadar region. The company has been in the constant touch with the lenders for the financing of the project and continues to do so. The Authority is fully aware that all debt financing for CPEC projects is fully backed by a coverage from China Export Credit and Insurance Agency (SINOSURE). Unfortunately, given the past and current circumstances surrounding the power sector in Pakistan, which GoP has been unable to address. SINOSURE has shown its serious concern and resistance to insuring any further power projects in Pakistan due to a number of reasons but primarily due to the following:
 - a. The ever-increasing trend of overdue payments to the already commissioned CPEC projects insured by SINOSURE with overdue levels now exceeding the "Maximum Amount" thresholds as agreed in the Power Purchase Agreements of the respective projects. As per our understanding these overdue amounts now exceed USD 1.2 billion
 - b. GoP's failure to open the escrow account as agreed with the already commissioned CPEC projects as part of the Supplemental Agreement to the Implementation Agreements. The revolving account was the mechanism agreed by the GoP with the Chinese agencies to address their concerns related to circular debt and overdue payments to then existing IPPs

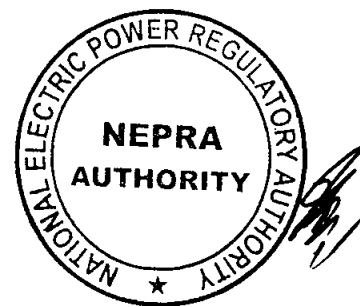


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- c. Reports that GoP is either seeking to renegotiate clauses of agreements as has been the case with power projects developed in the past under various policies.
- d. The above had resulted in a policy adjustment of SINOSURE for projects in Pakistan has creating issues with debt financing of the project and possible delay in achieving financial close on time. CCCG has visited National Development & Reform Commission (NDRC), China Development Bank and SINOSURE several times but there was no progress till recently where indications were received that the SINOSURE would be willing to move forward if key issues in the May 2019 tariff and financial guarantee for 25% commercial risk, for which three (3) years have now passed, are addressed in line with the current market situation.
- e. Whereas the company remained committed to the project and the subsequent development of the Gwadar region, the time lines related to the development of the project was seriously impacted given the above outstanding issues on account of the GoP. The sponsors have till date contributed more than USD 22 million towards the development of the project, however the Authority would appreciate that providing such funding with no sign of subsequent financing from banks through SINOSURE coverage as not possible.

- 7.2. CPCL vide letter dated June 27, 2023 submitted that Government of Pakistan (GoP) has set the Required Commercial Operation Dated (RCOD) for December 2025 and all stakeholders are actively working to meet this deadline. Any changes in fuel, particularly utilization of significantly lower heat value coal, necessitate a comprehensive evaluation of various aspects beyond the boiler, including plant design, coal availability, coal transportation and environmental implications.
- 7.3. According to the petitioner, it is fully prepared to conduct a comprehensive study, considering all the aforementioned factors. However, it is essential to acknowledge that such a study would require considerable time, resources, and effort, estimated to be within 9-12 months. Therefore, the Petitioner requested to extend RCOD and LOS deadlines to accommodate the study period.
- 7.4. The petitioner further submitted in the letter dated June 27, 2023 that GoP during the meeting held at the Ministry of Planning Development & Special Initiatives held on January 03, 2023, it was decided to continue the project with the existing setup following extensive discussions, studies on location shifting proposal, transportation of Thar coal and the proposed 500 KV transmission line. According to the petitioner, the project has progressed with the government's support and any reversal at this stage would have adverse consequences.
- 7.5. The submissions of the petitioner have been examined. The Authority noted that PPIB vide letter No. 1(103) PPIB-6016/22/PRJ/0-57557 dated July 15, 2022 extended Financial Close date of CPCCL upto December 31, 2022 subject to the condition that project would be converted/shifted on local Thar coal.
- 7.6. The Authority also considered minutes of meeting held in Planning Commission on January 03, 2023 submitted by Ministry of Planning, Development & Special Initiatives vide letter No. F.No.(1) MTA/SBDP/PD&SI/2023 dated January 03, 2023. The relevant contents of the minutes are reproduced hereunder:

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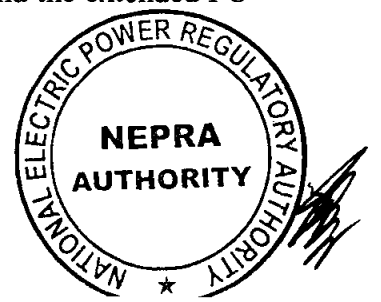


- i. The project is aimed at improving the reliability of the local power supply that would help gradually solve the problems in current economic development and urbanization of Gwadar Free Zone. It was informed that all major projects under CPEC in Gwadar and adjoining areas like NGIA, desalination plants, Pak-China Friendship Hospital, Pak-China Technical and Vocational Training Institute, Gwadar East-Bay Expressway, Gwadar Free Zone, Gwadar Industrial Estate, Gwadar Port Complex, University of Gwadar, as well as planned projects like Gwadar Oil Refinery, Gwadar Shipyard have a cumulative power requirement of more than 800 MW
- ii. The relocation of the project to Thar as well as use of local coal is not viable due long logistic lines and cost-benefit analysis including poor yield, high volatility, frangibility, etc and environmental concerns of local coal. The Planning Minister was further informed that such re-location of approved project is contrary to Chinese policy as no new coal project neither can be developed nor financed. The current Project is being developed- given the strategic objectives in Gwadar and dictates of Gwadar Smart Port City Master Plan
- iii. The house was informed that while COD of Project is 30 months, Chinese Company is seeking 3 years extension on account of financial closure etc. The Planning Minister observed that same is against the dictates of early availability of assured power requirements and directed that not more than 36 months (30 + 6) should be enough to complete issues pending with stakeholders. The Planning Minister further directed that Power division is to wholesomely review the project and address impediments in order to achieve COD no later-than December 2025 (i.e. 36 months)
- iv. GPA informed that COPHCL has formulated Gwadar electricity requirements' plan for next 10 years as well as assured consumption of 300 MW and the same is formally being shared with Power Division and all concerned. The Planning Minister directed Maritime Affairs Division, Power Division, Chairman GPA and COPHCL to ensure 100% power consumption of subject power power plant in order to obviate any financial loss as well as capacity charges to the national exchequer.
- v. After detailed deliberations, it has been decided that the subject power project shall continue to be established at already earmarked land at Karwat (Gwadar) to ensure stable and cheapest generation. The Project work must be started immediately with COD energization. Necessary actions are to be initiated by all concerned as per procedure en vogue

7.7. Subsequently, PPIB vide letter No. 1(103) PPIB-6021/23/PRJ/I-58672 dated April 05, 2023 further extended the financial close up to December 31, 2023. The relevant extract of the letter are reproduced hereunder:

- a) In view of decision of meeting presided over by Ministry of Planning Development and Special Initiatives (MoPDSI)/Co-Chairman JCC; the Board approved extension in Financial Closing Date upto 31st December, 2023 pursuant to Section 8.4 (ii) (c) of Power Generation Policy subject to:
 - i. Extension in validity of existing PG by three (03) months beyond the extended FC Date.

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- ii. Submission of prescribed fee, and
 - iii. Power Purchaser to amend PPA in line with the directions of MoPDSI and Ministry of Energy (Power Division)
- b) The company shall start construction at site prior to Financial Closing (FC) in order to achieve COD by 31st December 2025
- c) Company shall also submit timelines for achievement of COD by 31st December 2025 in line with the directions of MoPDSI and Ministry of Energy (Power Division)
- 7.8. The Authority noted that PPIB in its board meeting held on 16th March 2023 changed its earlier decision dated 13th December 2022 and approved extension in the FC Date upto 31st December 2023 with COD by 31st December 2025, keeping in view the fact that conversion of Project from imported to local / Thar based coal would not fit in timelines as decided by the Minister of PD&SI. Thus PPIB has extended the Financial Closing Date of the project to December 31, 2023 on imported coal. Further, the petitioner has also entered in to an EPC contract with SEPCO-1 based at NEPRA's allowed cost and as per the petitioner any significant modification to the existing EPC contract could potentially give rise to filing of claims by contracting parties. In view thereof, the Authority accepts the justification of the petitioner to continue on imported coal.

8. Whether the requested EPC cost of USD 403 million against the approved cost of USD 321 million is justified?

- 8.1. CPPCL submitted that due to inflationary trends prevalent globally, it has become impossible to conduct the project at the EPC price determined by the Authority. The Petitioner vide Addendum dated May 05, 2023 submitted that as per typical bidding process, price submitted as part of bid or agreed upon within an EPC contract always has a term of validity. Once the term of validity lapses any EPC contractor has the right to claim an adjustment to the previously agreed price on account of price escalations and/or design changes, if any, or to terminate the contract. CPPCL submitted following comparison in support of its claim:

Description	May 2019	June 2022	Change
PPI Iron and Steel	229.10	395.39	72.59%
PPI Electrical Equipment	116.90	127.94	9.44%
LME Copper Index	5825	9820	68.58%
LME Index	2769.90	4829.80	74.37%
Transportation Index	9738.03	14865.06	52.65%
Local Cement (PKR/Bag)	630	1080	71.42%
Local Rebar Steel (PKR/Kg)	120	222	85%

- 8.2. According to the petitioner, to date a Notice of Proceed (NTP) was not issued on account of delays for reasons beyond the control of the company. The EPC contractor has claimed an adjustment to the EPC price since three years have elapsed from the EPC contract execution date and major events have occurred including but not limited to COVID-19, Russia-Ukraine war, global price hikes, foreign exchange devaluation, imports prohibition, non-availability of FOREX and economic crises within Pakistan which have had a serious financial impact on the EPC price during this period.

- 8.3. CPPCL requested the Authority to rely on its own cost adjustment mechanism as approved in the Upfront Tariff dated June 26, 2014 which uses US Power Producer Indices (PPI) for adjustment of capital cost between any two dates. As per Clause II (viii) of the Upfront Tariff, 51% of the capital cost was allowed to be indexed to US PPI for steel, 38% with US PPI for electrical machinery and no indexation allowed for the remaining 11% of the capital cost. Since the project's tariff was determined by the Authority in May 2019, the Company has indexed the EPC price allowed by the Authority in the Revised tariff determination to the values prevailing today i.e. March 2023. The formula as provided within the Upfront Tariff is reproduced below for reference

$$CC_{(n)} = (CC_{(o)} * 51\% * \Delta ST) + (CC_{(o)} * 38\% * \Delta EI) + (CC_{(o)} * 11\%)$$

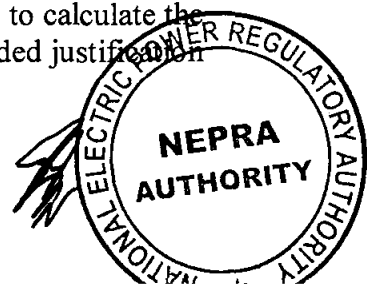
- 8.4. According to the Petitioner after analysing the data on the fluctuation of the US PPI, as recorded and disseminated by the US Bureau of Labor Statistics between May 2019 and March 2023, the company computed the adjusted EPC price using the methodology prescribed by the Authority in the Upfront Tariff which results in the revision of EPC price from USD 321.4 Million to USD 416.63 Million. The company has adopted the indices used by the Authority itself for determination of one-time adjustment at COD of Sahiwal Power Plant, Port Qasim Power Plant, China Hub Power Plant and Engro Thar Power Plant – US PPI Iron and Steel and US PPI Electrical Machinery and Equipment.
- 8.5. CPPCL further submitted that the company would like the Authority to reconsider the actualization of various EPC cost items such as bridges, housing colony, site levelling, boundary wall, security cost, anticorrosion, construction power, cost of black start facility measures. This is not only difficult to assess and segregate from a lump sum EPC contract but it is also not a standard practice followed in turnkey EPC contracting and even in the precedent projects in NEPRA. The Authority must consider that the bidding process which was conducted in accordance with guidelines issued by the Authority did not had actualization components of the EPC price as per the standard practice as well. Therefore, the conditions imposed by the Authority in the Revised Tariff Determination are unreasonable and may please be removed.
- 8.6. The submissions of the petitioner have been examined. CPPCL has not submitted any supporting documents/evidence with respect to its request to allow additional EPC cost of USD 81.59 Million except for the formula provided in the Upfront Coal Tariff dated June 26, 2014.
- 8.7. The Authority observed that the allowed cost of US\$ 321.41 Million for new and clean plant (green field), was arrived at after due deliberation by the Authority and that the submissions of the petitioner were also analysed by the Authority at that time. The Authority rationalized the EPC on the basis of EPC cost of JPCL as the same was determined after an independent and transparent bidding process carried out by Asian Development Bank (ADB). Moreover, as submitted by the Petitioner, it has signed Turnkey contract with the EPC contractor based on the cost allowed by the Authority.
- 8.8. Further, the request of the petitioner to allow indexations as per the formula provided in the Upfront coal tariff is not applicable in case of petitioner as the mechanism was provided in the upfront tariff which was not opted by the petitioner. The petitioner's cost plus tariff did not include any such indexation mechanism and the fact that the petitioner has already signed a turnkey EPC contract. Accordingly, the Authority decided to maintain its earlier decision in the matter.

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9. Whether the request to remove the provisions limiting the project cost indexation to a specific PKR rate i.e. 105/USD is justified?

- 9.1. CPCL submitted that the Authority stipulated that for cost items other than foreign EPC cost, the amounts allowed in USD will be converted in PKR using the reference exchange rate of PKR/USD 105. The company has sought clarification from the Authority on the same, however, to date the company has not received a written reply or clarification from the Authority. The clarification required is whether the cost items other than foreign EPC cost refer to all other project cost or all other EPC cost item. If the Authority fixes the exchange rate even the Onshore EPC cost, it renders the project as infeasible and unviable. The projects entire investment is in US dollars and project expenditure are estimated in US dollars as per power policy 2015.
- 9.2. According to the Petitioner, the rationale behind splitting EPC contract into offshore and onshore is not segregate the payment currencies. In South Asian countries, intricate and constantly evolving tax policies pose significant challenges as tax rates and basis are difficult to be estimated. The Authority did not precisely evaluate the sales tax and withholding tax rates while calculating project tariff. Hence investors split EPC contract into onshore contract, which typically consist design, installation and local procurement and offshore contract which involve equipment procurement and transportation. As the original EPC contract is bifurcated into two contracts, onshore and offshore, an umbrella agreement links them organically to maintain consistency with the original EPC contract in terms of work scope, price, schedule, rights and obligations. Therefore, the EPC contract splitting does not compromise the integrity of the original EPC contract. Investors/contractors opt for the US dollar as the payment currency for the onshore contract.
- 9.3. According to the petitioner, the exchange rate in January 2018 was PKR/USD 112.65 when the petition was filed. The exchange rate was 139.9 by the time the Authority issued tariff determination and 149.15 by the time the Authority issued its decision on the review. Presently, the exchange rate has fallen to PKR/USD 300. Given the current and projected economic conditions, there is no visibility on interest rate for the next three to four years. EPC contractors or investors now find it impossible to pursue the project with such onerous clause.
- 9.4. According to the petitioner, fixing exchange rate would jeopardise the progress made till date by the Chinese and Pakistani governments towards financing the project. The current economic challenges within the power sector in Pakistan created significant difficulties for investors in securing loans for the projects and fixing exchange rate will result in the termination of the project. Therefore, the company requested the Authority to clarify or revise the determination of the onshore EPC cost based on the actual rate at the date of the milestone payment.
- 9.5. The submissions of the petitioner have been examined. The Authority in its earlier decision decided as under:
- "For cost items other than foreign EPC cost, the amounts allowed in USD will be converted in PKR using the reference PKR/USD rate of 105 to calculate the maximum limit of the amount to be allowed at COD"*
- 9.6. The intent of freezing costs other than offshore EPC cost was to convert all the onshore EPC and local non-EPC costs into Pak Rupees at the exchange rate of Rs. 105/US\$ to calculate the maximum limit of the amount to be allowed at COD. The petitioner has provided justification

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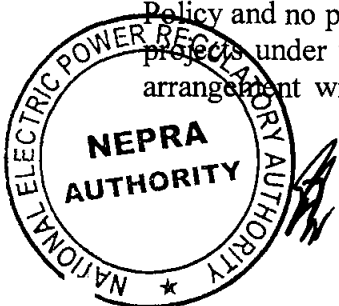


for delay in project by submitting that after a prolonged process of nearly 4 years, PPA and IA for the Project were executed by the respective GoP agencies in April 2021 with Company and almost two years later after the finalization of the tariff by the Authority in May 2019. The Authority has also taken into considerations submission of Planning Commission whereby it has been mentioned that the project is aimed at improving the reliability of the local power supply that would help gradually solve the problems in current economic development and urbanization of Gwadar Free Zone.

- 9.7. The Authority understands that with this prolonged delay, it would not be possible for the company to complete the project at the already allowed cost of Onshore EPC of around Rs. 10,924 Million as nothing has been executed on ground as such. In view thereof, the Authority has decided to allow one-time adjustment of NCPI as of June 2023 for the allowed Onshore EPC cost as per the Determination dated May 31, 2019. The revised onshore EPC cost now works out as Rs. 20,162 Million which will remain fixed and no further indexation/adjustment would be allowed on this cost in future.
- 9.8. Thus, Dollar variation will be strictly allowed to only those payments which are actually incurred in Dollars i.e. it excludes all the payments made by the petitioner in Dollar terms to any contractor or its subsequent sub-contractor whose services can be (services or goods which can be procured locally) or is contracted in Pak Rupees.

10. Whether the requested Sinosure Fee at actual under a Buyers Credit Insurance subject to maximum of 7% of debt servicing is reasonable and justified?

- 10.1. CPPCL submitted that as per the agreement between Pakistan and Chinese government, Sinosure Fee upto a maximum of 7% of debt servicing is allowed as credit risk insurance for all CPEC projects. This limit is if the project is insured under a Buyer's Credit Insurance Policy, which requires an upfront Sinosure Fee payment by the company. An alternate policy is Overseas Investment Insurance Policy, which typically entails annual payments by the Company during the debt tenor.
- 10.2. According to the petitioner, based on initial indications the company in the tariff petition proposed that the project may be insured under the Overseas Investment Insurance Policy and cost related to the same was assumed. However, a clear caveat was included that in case the company is required by Sinosure or Lenders to procure a different policy, the cost for the same may be included. The applicability of a specific policy is not in the control of the company as it is determined by Sinosure or Lenders based on its own risk assessment.
- 10.3. CPPCL vide addendum dated May 05, 2023 submitted that the cost of two alternatives cannot be compared as Sinosure Fee under Buyer's Credit Policy is calculated based on swap rate corresponding to the respective tenor of the project at the time of procurement of insurance and is procured one time at the start of the project, while Sinosure fee under Overseas Investment Insurance Policy is calculated based on prevailing quarterly LIBORs during the operating period which has potential to change and hence effective cost under the same remains uncertain. Therefore, it is not appropriate to compare the two alternatives in terms of cost.
- 10.4. CPPCL further submitted that the proposed policy under Upfront Tariff is Buyer's Credit Policy and no provision exists for Overseas Investment Insurance Policy, despite the facts that projects under the Upfront Tariff 2014 were entitled to both options based on their unique arrangement with lenders. Moreover, the Authority has provided flexibility to adopt either



11



policy in Section 36.5 of the tariff determination for Matiari-Lahore Transmission Line Project vide letter No. NEPRA/TRF-351/PPIB-2016/11318-11321 dated August 18, 2016.

- 10.5. In spite of the above precedents and submissions, the Authority issued following clarification in response to its ruling vide letter No. NEPRA/SAT-II/TRF-434/18789 dated October 8, 2019:

"In case of alternative Sinasure fee arrangement, the same shall be computed with the cost allowed as per the above mechanism and in case the alternative arrangement is within the allowed cost, the same shall be considered for adjustment at the time of COD"

- 10.6. In light of the above, the petitioner requested the Authority to allow Buyer's Credit Policy as it has been strongly indicated by Sinasure as the likely policy under which the project will be insured. Subsequently, the Petitioner vide letter November 18, 2022 requested to allow upfront Sinasure rate of 5.3%.

- 10.7. The submissions of the Petitioner have been reviewed. It is pertinent to mention that during the hearing, the Authority directed CPPCL to provide cost comparison between Buyer's Credit Policy and Overseas Insurance Policy, however, no such comparison has been provided.

- 10.8. The Authority allowed Sinasure fee at the maximum limit of 0.6% of yearly outstanding principal and interest amount during construction and during operation period keeping in view its decisions in other cases of generation tariff for hydro, solar and wind wherein the provision of Sinasure has been allowed for power projects with Chinese financing. The Authority also vide letter dated October 08, 2019 clarified to the petitioner that:

"In case of alternative Sinasure fee arrangement, the same shall be computed with the cost allowed as per the above mechanism and in case the alternative arrangement is within the allowed cost, the same shall be considered for adjustment at the time of COD"

- 10.9. Thus as per the above, the petitioner has the option to switch for the alternative arrangement provided that it remains within the allowed cost. In view thereof, the Authority does not see any rational to modify its earlier decision.

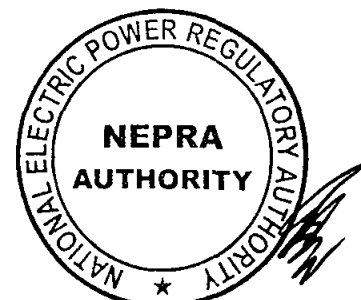
11. Whether the request to include the financial guarantee as part of the annual recurring costs @0.9% of the guaranteed amount applicable in a particular year is reasonable and justified?

- 11.1. CPPCL submitted that due to adverse risk profile of the power purchaser, Sinasure will only cover 70% of the commercial risk of the project, whereas, 25% of the commercial risk is to be covered by the financial guarantee from sponsors in favour of lenders. A similar arrangement was also in place at the time of the financial close of Engro Thar and Shanghai Electric Thar power projects. Accordingly, the petitioner requested to include financial guarantee as part of the annual recurring cost @ 0.9% of the guaranteed amount applicable in a particular year.

- 11.2. CPPCL vide Addendum dated May 05, 2023 submitted that it has received an indication that 1% guarantee cost will apply on the guarantee amount and requested to allow cost of providing guarantee as part of the project cost (for portion related to construction period) and O&M cost (for portion related to operation period).

- 11.3. CPPCL also requested to allow following costs as pass through items:

is noted, &





- i. Annual recurring guarantee cost of 1% during the construction and operation period.
- ii. LC cost on account of Debt Service Reserve Account-DSRA (1.1 times of the principal and interest of two instalments) during the term of debt on annual basis.
- iii. Lender's advisors fee paid by the company during the term of debt at actual not exceeding US\$ 0.89 Million on yearly basis.

11.4. The submissions of the Petitioner have been examined. It is pertinent to mention that the Authority has not allowed guarantee cost to any other power plant. The Authority rejected the request of Engro Powergen Thar to allow Guarantee Fee of 1.16% in the COD tariff decision. Moreover, during the hearing the petitioner was directed to provide supporting documents in respect the guarantee cost, however, no information has been received yet. Further, sinosure premium is allowed on 100% debt servicing cost. Therefore, there is no justification to allow the additional cost for the same risk that is already covered through sinosure. It is also pertinent to mention that the already allowed Financing Fee & Charges @ 2% to the petitioner is as per the Tariff Guidelines 2018. This is the benchmark budgeted cost and the petitioner should cover all its cost including Lender's advisor fee and LC on DSRA within the allowed benchmark. Therefore, there is no justification to allow any additional cost in this respect. Accordingly, the Authority has decided to disallow the requested costs.

12. Whether the requested project development and sponsor's cost of USD 47.87 million against approved cost of USD 10.50 million is justified?

12.1. CPPCL submitted that the company had in the tariff petition requested project development cost of USD 47.87 million which included following cost:

Cost Item	Amount (USD Mil)
Development Costs	47.86
Owner's Direct Costs	26.84
Salaries	20.08
Rents	1.89
Travel	3.44
Administration	1.43
Consultant and Advisory Costs	20.43
Lead Project Development Advisor	0.65
Local Legal Advisors	0.26
Chinese Legal Advisor	0.50
Feasibility Studies and Project Studies	6.62
Independent Engineer	0.50
Accounting & Tax Advisor	0.41
Project Owner's Engineer	10.00
Other Advisors	0.49
Technical Advisor	1.00
Regulatory Fees (NEPRA, SECP, etc.)	0.60



12.2. According to the petitioner till date, it has incurred USD 22 Million on account of project development cost. The Authority in the original determination slashed the cost to USD 7.73

is made A



million by benchmarking it with CMEC 330 MW coal power plant (a project never thrived). Under the review determination the cost increased to USD 10.50 million. According to CPPCL, the Authority did not consider the fact that 330 MW CMEC was an EPC contractor-developed project for which the EPC price approved was USD 444.19 Million which works out USD 1.35 million per MW as opposed to USD 1.07 million per MW for Gawadar. The comparison with CMEC is unjustified and if the Authority intends to do so, it should take the entire cost of 330 MW CMEC as a benchmark.

- 12.3. The petitioner further submitted that it is not reasonable to benchmark such costs against CAPEX of 1,200 MW thermal projects as the total cost remains the same regardless of project size. Moreover, RLNG project costs were based on local sponsor/employee costs; a package deals with NESPAK across three similar projects and locations far more developed than Gawadar.
- 12.4. CPPCL requested the Authority to objectively evaluate each item under these heads instead of using percentage benchmarks with other projects. The Authority has itself acknowledge in the past that this cost do not have a linear relationship with project size and hence comparison with other thermal projects with much larger size is not warranted. Accordingly, the petitioner requested the Authority to allow USD 47.87 million to its project development and sponsor's cost.
- 12.5. CPPCL in the Addendum to the Modification Petition dated May 05, 2023 submitted that the Company has already incurred costs of USD 17.37 Million (development cost: USD 13.29 Million) from 2017 to June 30, 2022 which has well exceeded the budget allowed by NEPRA of USD 10.50 Million, noting that the company is yet to commence its construction and has 30 months of development costs to be incurred during the construction phase. These are pre-development costs incurred during the last six years due to delay in the project development solely attributable to the Government of Pakistan and its entities. Hence, the company believes that it has a just right to claim these costs and humbly requests to allow these costs.
- 12.6. According to CPPCL, the project management service providers have requested compensation for the relevant costs during such pre-development period. The total cost claimed by PMC contractor and security agency is USD 1.58 million and USD 0.43 million respectively. The company is in negotiations with PMC contractor and security agency to waive the cost claim, however, in case the cost claim is not waived the same shall be claimed from the Authority at the time of COD. Further, the company believes that it will incur cost of USD 36.80 Billion if it were to start construction today.
- 12.7. CPPCL requested the Authority to allow USD 47.87 Million in consideration of following
- Development cost of USD 13.29 Million incurred
 - Development cost of USD 36.8 Million to be incurred
 - Portion of development cost originally budgeted but already paid USD 2.23 Million
- 12.8. The submissions of the petitioner have been examined. During the hearing, the petitioner was directed to provide detail and justification of development cost incurred, however, no response has been received from till date. The Authority in its decision dated May 31, 2019 stated that



ss Malik, A

"the EPC contract of JPCL, which was used as a reference project, clearly mentioned that it is the responsibility of the EPC contractor to complete all surveys, studies and report preparation including:

- i. Site Surveys, including topography, bathymetric, geotechnical, seismic conditions, hydrographic;*
- ii. Meteorology studies*
- iii. Hydrographic study*
- iv. Hydraulic calculations — steady state and dynamic*
- v. Project design report*
- vi. Hazop studies*
- vii. Electrical studies for grid connection*

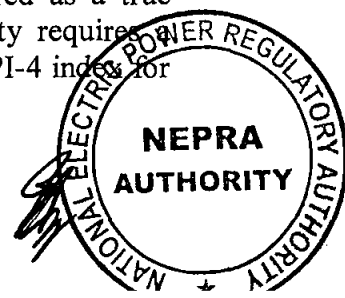
It is pertinent to mention that CPPCL vide letter dated May 16, 2019 submitted that if the Authority desires to set project development and company sponsor costs based on past precedence, then it may approve the cost based on the construction time-period of different projects. In this regard, coal fired subcritical PC boiler based CMEC power plant having capacity of 330 MW provided a reasonable reference to allow the cost (in absolute numbers adjusted for 30 months construction period) under this head. In the referred project, the Petitioner requested US\$ 14 million under this head for a construction period of 40 months. Accordingly, the Authority decided to allow proportionate cost of US\$ 10.50 million under this head for 30 months construction period on account of project development and Company & Sponsor's cost."

12.9. Since CPPCL did not provide any new evidence or supporting documents in support of its claim, therefore, the Authority has decided to maintain its earlier decision in the matter.

13. Whether the request to keep API-4 as the base index for the determination of coal price as outlined in the Authority's fuel pricing mechanism dated 23rd September 2016 is reasonable and justified?

13.1. CPPCL submitted that as per Article 22.3 of the revised determination, the Authority has changed the benchmark index for coal pricing from API-4 to API-3 on the premise that the design coal requirements for the project are 5,550 kcal/kg. According the Petitioner, as per the submitted performance guarantees, the design coal calorific value is 5,371 kCal/kg (LHV) on received basis which is the minimum calorific value required to ensure the performance of the boiler. Availability of coal of a specific value is impossible and the supply of coal operates within a range. Accordingly, the petitioner requested the Authority that to keep API-4 as base index for determination of coal price as outlined in the Authority's fuel price mechanism dated September 23, 2016.

13.2. The petitioner vide Addendum dated May 05, 2023 submitted that API-3 lacks liquidity and responsiveness in the international market and therefore, cannot be considered as a true reflection of the market price of coal. Coal being a volatile bulk commodity requires corresponding futures contract for hedging and the same is available for the API-4 index for



South African coal, which makes the API-4 index easily accepted by traders in all segments of the market as a basis for pricing.

13.3. The submissions of the Petitioner have been examined. It has been noted that in Pakistan RB3 coal with CV of 5500 kcal/kg is being imported for power generation. Therefore, the Authority in its decision allowed an index that matches the expected quality of coal to be imported by the petitioner for power generation.

13.4. It is also important to mention that the Authority has initiated the process of revision of coal pricing mechanism which will established the indices for various origin of coal. Once that proceeding is concluded it is expected that index for the type of coal to be imported by the petitioner will be decided. Therefore, for the purpose of instant modification request, the Authority has decided to maintain its earlier decision.

14. Whether the request to apply taxes & duties clause of upfront tariff in the instant case is justified?

14.1. The Petitioner submitted that the coal upfront tariff 2014 contains following provision in the Order part of the decision:

"No withholding tax on local foreign contractors, sub-contractors, supervisory services, and technical services provided by foreign (non-residents) entities has been assumed. Actual expenditure, if any, on this account will be included in the project at the time of COD on the basis of verifiable documentary evidence"

14.2. The petitioner requested the Authority to clarify whether the abovementioned provision shall be applicable in the instant case.

14.3. CPPCL vide Addendum dated May 05, 2023 submitted that it claimed USD 40.11 in respect of taxes and duties pursuant to laws and regulations prevailing at the time. In the event, the tax rates or budgeted tax amounts turn out to be different, the Authority may approve the same as a part of the project cost. Furthermore, any tax incidence related to corporate income tax dividend withholding tax, poverty alleviation tax, employee profit-sharing fund, employee welfare fund and the taxes levied in Balochistan province are not considered in tariff petition/determination/revised determination. If the company becomes liable for the said taxes, it would like the Authority to consider allowing them as part of project cost.

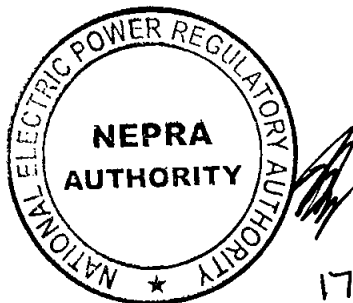
14.4. As per Section 11.4 of the tariff determination, the Authority has determined the following:

"Actual withholding tax not being of refundable/adjustable in nature shall be incorporated at the time of COD on the basis of verifiable documentary evidence. Sales tax is a value added tax and has not been considered as part of the Project Cost"

14.5. Against this backdrop, the Company sought the admissibility of Sales tax cost as part of the project cost while which was clarified by the Authority as per Section 6.76 of the revised tariff determination as follows:

"The Authority while adjusting tariff at the time of COD of a new commissioned coal power plant included non-adjustable sales tax during construction period on import of plant & equipment and construction activities in the project cost and the same mechanism shall apply in the instant case"

- 14.6. However, with reference to Port Qasim power plant, Sahiwal plant and China Hub power plant, while withholding tax has been fully allowed by the Authority, sales tax has not been fully allowed by the Authority on the basis that the same can be adjusted by the companies against the output sales tax. While such power plants have filed claims with the FBR for adjustment of output sales tax/refund applications, the same have either been rejected by the FBR for one reason or another, or the companies have not been able to fully adjust the same for many years of operation.
- 14.7. The project cost approved by the Authority currently do not capture the costs related to withholding taxes, sales tax and resulting incidental costs associated with the Sinosure fee and IDC. While the Authority does recognize that it will calculate the same based on verified documents to be submitted at COD, lenders do not recognize this while sanctioning the loan amount for the project. As a result, the lenders have insisted to seek clarification from the Authority regarding provisional amounts so that financing against the same can be considered by the lenders.
- 14.8. The petitioner requested the Authority to determine a provisional amount of withholding tax and adjustable sales tax and include it in the project cost which shall be subject to adjustment at COD so that the company can meet requirements of the lenders.
- 14.9. The submission of the petitioner has been reviewed. In Para 11.4 of decision dated December 19, 2018, the Authority expressly submitted that actual withholding tax not being of refundable/adjustable nature shall be incorporated at the time of COD on the basis of verifiable documentary evidence. However, further clarification on account withholding tax is as under:
- "No withholding tax on local foreign contractors, sub-contractors, supervisory services, and technical services provided by foreign (non-residents) entities has been assumed. Actual expenditure, if any, not being of refundable/adjustable nature, on this account will be included in the project at the time of COD on the basis of verifiable documentary evidence"*
- 14.10. Sales tax is a value added tax and has not been considered as part of the project cost. Similarly, the Authority in its decision dated May 31, 2019 expressly stated that non-adjustable sales tax on import of plant & equipment and construction activities will be included in the project cost. Para 6.75 of the decision is reproduced hereunder"
- "The Authority while adjusting tariff at the time of COD of a new commissioned coal power plant included non-adjustable sales tax during construction period on import of plant & equipment and construction activities in the project cost and the same mechanism shall apply in the instant case."*
- 14.11. However, the request of the petitioner to consider adjustable sales tax as part of the project cost is not justified as the same has not been allowed to any other power plant. Moreover, the adjustment of tax is a matter between the power plant and FBR, therefore, the company should raise the issue at relevant forums instead of requesting to pass on the burden of adjustable tax to electricity consumers of the country. The Authority has decided to maintain its earlier decision in the matter.



15/11/2022

15. Whether the request to allow upward adjustment of IRR to 17% from 14% is justified?

- 15.1. CPCL submitted that the Authority under the revised determination allowed an IRR of 14% to the project with a withholding tax of 7.5% for a net return of 12.95%. According to the Petitioner, the Authority's view that sufficient power has been added to the grid and therefore, project returns should be reduced is not judicious. Given the economic situation of the country reflected by falling credit ratings, inflationary environment, and destructive exchange rate loss attributing to capacity payment and energy payment delay warrant that the returns on the project be reconsidered.
- 15.2. CPCL vide Addendum dated May 05, 2023 submitted that the Authority ignored the high-risk zone in which the project is located and the strategic nature of the project. The Authority ignores that even for those precedents projects with allowed IRR of 17%, they have been unable to repatriate dividends to shareholders. If CAPM is adopted to understand the minimum equity returns for investments within the project as of today, it would provide a sound mechanism widely accepted by finance professionals in the investments sector for understanding the risk dynamics of investment in the project keeping in view the return in mature markets, overall country risk, inflation differential compared to mature economies equity risk premium within the country etc.
- 15.3. For computation of equity returns based on CAPM, data from IMF outlook, the US treasury website and publications of Professor Aswath Damodaran have been relied upon. Based on the same basis, overall cost of equity investment in the project works out to be at least 43% while ignoring any project specific risks that may apply. Accordingly, the petitioner requested to allow IRR of 17% as it is a suitable return keeping in view extreme risks of investment in Pakistan
- 15.4. The submissions of the Petitioner have been examined. The IRR of 14% was allowed in line with the return allowed to other power technologies/fuels e.g. wind, solar hydro and nuclear, prevalent at that time. The tariff was awarded to the project company back in 2019 on the basis of which the company has signed the EPC contract and has already incurred significant amount on account of project development hence qualifies for maintenance of the already allowed returns. In view thereof, the Authority decided to maintain its earlier decision in the matter of IRR of 14%. It is however pertinent to mention that in the previous determination, IRR of 14% was allowed assuming annual payment of ROE component. Since the payment of capacity charges is going to be made on monthly basis, therefore, to match the payment with allowed return, the Authority has decided to use XIRR of 14%.

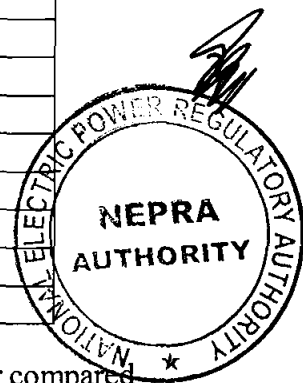
16. Whether the requested O&M cost of USD 17.43 Million is justified?

- 16.1. CPCL submitted that the Authority has determined annual O&M cost of project at US\$ 12.71 Million against the petitioned amount of US\$ 17.43 million. In order to arrive at O&M cost of US\$ 12.71 Million, NEPRA has referred to Regulation 29 of the CERC Tariff Regulations 2014 India, whereby benchmark O&M cost of IRs. 30.51 Lakh/MW for 200/210/250 MW sets for FY 2018-19 has been provided
- 16.2. CPCL vide Addendum dated May 05, 2023 submitted that the Authority erroneously used a cost of IRs. 30.51/MW for 200-250 MW unit while overlooking that CERC regulations allow

escalation on per unit basis for smaller units and that the unit size for the instant project is 150 MW. So, if same table is used by the Authority as reference and apply escalation available within the table for 200-250 MW unit over 300-350 MW unit of 19.79% (30.51/25.47-1), the resulting cost would be 36.55 lakh/MW (USD 50.760 MW) which further results in USD 15.23 million per annum. Adding the USD 2.26 Million security cost claim would result in a total assessed O&M cost of USD 17.49 Million, which justifying the claim of the company of USD 17.49 million. The Authority may please take note that this does not yet take into account that the CERC Regulations require an escalation in costs, given that the same were published in 2014 and the Authority issued its decision in 2019.

- 16.3. The petitioner further submitted that the Security cost during operating period approved by NEPRA was made by taking reference of 1263 MW RLNG power project (only 0.61 Million per year). The security situation at Gawadar district is far more severe than that of Punjab. Therefore, it is appropriate to directly cite the security costs of a project from Punjab. Additionally, the project has unique environmental factors including the occupation area, terrain, number of entrances and exists, boundary wall, security personnel allocation, requirements of security patrols and inspections, level of vigilance and work pressure, Therefore, minimum security cost of USD 2 million is justified for safety of plant and personnel. The petitioner also provide following comparison with O&M cost allowed in Upfront Coal tariff in 2014:

Description	Upfront Tariff 2014	Upfront Tariff 2014 (Indexed)	Gawadar Tariff Petition
Fixed O&M – Local	0.1806	0.2044	0.2592
Fixed O&M – Foreign	0.1806	0.2127	0.5031
Variable O&M – Local	0.0456	0.0516	0.0717
Variable O&M – Foreign	0.0684	0.0806	0.0662
Ash Disposal	0.2200	0.2200	-
Limestone	0.0900	0.0900	-
Total O&M Cost	0.7852	0.8593	0.9002
<u>Adjusted for:</u>			
Ash Disposal	0.2200	0.2200	0.0848
Security Cost	-	-	0.1167
Net O&M Cost	0.5652	0.6393	0.6987
Difference			9.29%
Indexation Parameters			
Exchange Rate	97.10	110.50	
US CPI	238.34	246.669	
Local CPI	194.74	220.42	



- 16.4. According to the petitioner, net O&M cost of PKR 0.6987 per kWh is only 9% higher compared to indexed O&M tariff of Upfront Tariff 2014 which is justified on grounds of substantial escalator in terms of manpower and services cost which prevail in Gawadar compared to other similar projects developed in Pakistan

- 16.5. CPPCL submitted that in light of the above, the company finds the originally claimed amount to be justified and hence the company requests the Authority to approve the originally petition amount of USD 17.43 Million. Additionally, as an alternative to funding the debt service

reserve account through project finance, the company has to issue a standby letter of credit against the amount to be reserved for debt service, cost of which has been indicated by the issuing bank at 1%. Therefore, the company requests that the same may please be allowed as part of the O&M expenses on an actual basis.

16.6. The submissions of the petitioner have been reviewed. Regarding base O&M tariff, the petitioner has highlighted an error on part of NEPRA stating that in CERC regulations (used as a reference for arriving at O&M cost of instant project) an additional factor was missed by NEPRA. The referred regulations have been reviewed and it has been noted that the petitioner is using its own assumptions for justifying and arriving at its required costs. Therefore the same is not justified.

16.7. It is important to highlight that while comparing the allowed fixed O&M with O&M cost allowed in upfront coal tariff, the petitioner erroneously grossed up NEPRA approved fixed O&M for upfront (220/350MW) by 85% from 0.1535/kW/h to 0.18/kW/h. This is not correct comparison as the fixed O&M is required to be paid on 100% available capacity not on grossed up basis.

16.8. It is also noted that the overall O&M cost allowed to the petitioner is higher as compared to the O&M cost allowed in other projects of similar size category 220/350 MW plant (updated by using ER and CPIs mentioned in the decision) as tabulated below:

	V. O&M Local Rs./kWh	V. O&M Foreign (Rs./kWh)	F. O&M Foreign (Rs./kWh)	F. O&M Local (Rs./kWh)
Reference upfront (2014)	0.0456	0.0684	0.1535	0.1535
Revised upfront (as per the CIHC decision ER/CPIs)	0.0578	0.0795	0.1784	0.1946
Total Upfront	0.1373		0.3729	
Allowed CIHC	0.0717	0.0662	0.2338	0.2338
Total CIHC	0.1379		0.4676	

16.9. In view thereof, the allowed O&M cost has been adjusted in line with the O&M cost allowed in other coal projects.

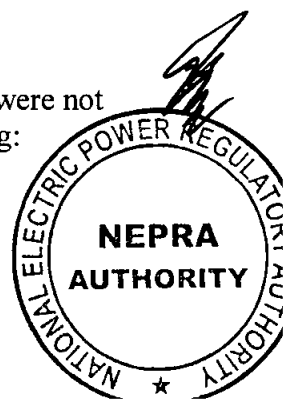
16.10. It was however noted that the O&M cost allowed in the instant project doesn't have any provision for limestone and Ash disposal cost which is otherwise allowed as a separate line item in addition to allowed O&M discussed above. The Authority has decided to allow cost of Limestone and Ash Disposal which shall be subject to submission of supporting documentations and payment evidences

16.11. Regarding the plea of the petitioner that the security situation at Gawadar district is far more severe than that of Punjab, the Authority while deciding the MLR was cognizant of the security situation at Gawadar. Therefore, the Authority has decided to maintain its earlier decision in the matter.

17. Other Issues

17.1. The Petitioner vide addendum dated May 05, 2023 submitted following issues which were not part of the tariff modification petition and accordingly were not made issues of hearing:

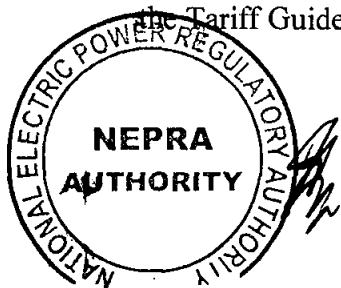
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Debt to Equity Ratio

- 17.2. As per Section 19.3 of the Tariff Determination, the Authority mentioned that once proposed by the Project Company, change in capital structure resulting in higher tariff shall not be permitted. This was determined by the Authority in spite of the fact that the Company had disclaimed in the Tariff Petition that the 80% debt-based funding was strictly provisional and based on indicative term sheets provided by lenders, which could vary as the Project progressed.
- 17.3. The capital structure typically determined by the Authority in the past allows for debt in the range of 70% -80% range and even the Guidelines do not provide for any change in this regard. The Authority may please note that the Company explicitly stated in the Tariff Petition that it has not yet reached on a final agreement with its banks on the financing terms. The Company further sought from the Authority to allow the Company the flexibility to adjust its debt-to-equity-ratio based on realized ratio. The Company believes that under the Power Policy 2015, the Government of Pakistan allows equity funding fluctuations of 20 to 30%.
- 17.4. In light of this, the Authority may kindly retain the flexibility on the debt-to-equity-ratio as per the precedent as the lenders have raised the above issue several times and the investors are also concerned that this provision will affect the Project's viability. The Authority may please further note that no project can achieve exactly 80:20 of debt-to-equity ratio. This is because typically under the Sinasure-backed financing, lenders fund only 85% of the EPC costs and Sinasure's fee and interest during construction. Therefore, the Authority's limit of 80:20 of the debt to equity is unjustified.
- 17.5. According to the petitioner third parties have given their assent to furnish an irrevocable bank guarantee to the lenders to cover the risk of tariff payment default of 25% of the aggregate principal and interest amount. It must be noted that the company bears an actual risk amounting to 40% of the total investment, rendering the imposition of a fixed debt-to-equity ratio impractical by the Authority. Generally, banks prefer to have a lower debt-to-equity ratio to mitigate the risks they are exposed. Thus, a high debt-to-equity ratio can hamper a syndicate's fundraising initiative given that it is almost impossible to achieve. Furthermore, the low IRR and high debt-to-equity-ratio approved by the Authority does not represent a balanced risk-sharing model for the Project. Consequently, even if external pressures necessitates the commencement of the Project, the risk of abandonment remains.
- 17.6. The company requested the Authority to approve the proposal to flexibly adjust the proportion of debt and equity amounts at the COD, based on the final loan terms realized with the lenders, with a floor of 70:30 on the debt-to-equity ratio. This approach will better reflect the actual financing requirements of the Project and balance the risks and returns of both the investors and the lenders. The proposal aligns with market's best practices and the provisions of the Power Policy 2015 which allows for a flexible equity ratio between 20% to 30%. The Company strongly believes that this adjustment will enhance the Project's investment and financing prospects.
- 17.7. The submissions of the petitioner have been examined. This issue was also discussed in the MLR decision dated May 2019 wherein the Authority did not accept the request of the petitioner to change the debt equity ratio and maintained the debt equity ratio of 80:20. Further, the Tariff Guidelines 2018 also provide that *notwithstanding the foregoing, capital structures*



18/11/2022

for all Technologies, except Hydel shall be approved on a 80:20 debt-equity ratio. Accordingly, the Authority has decided to maintain its earlier decision in the matter.

Long Term Coal Agreement under OPP Mechanism

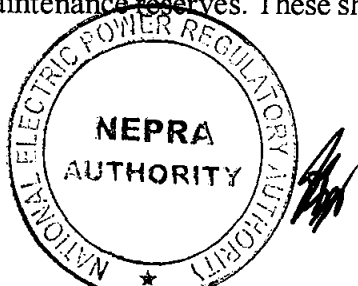
- 17.8. During the negotiations of the Quadpartite Power Purchase Agreement (QPPA) with CPPA-G. CPPA introduced a Quarterly Power Purchase (QPP) mechanism in the QPPA to replace the "Minimum Annual Energy" mechanism available in the standard PPA for other coal power projects (which in turn required minimum procurement to be at least 0.5 of the Available Capacity during an Agreement Year).
- 17.9. Under the QPP mechanism, the System Operator submits and notifies the energy requirements on a quarterly basis with no long-term energy requirements notification, which makes it extremely difficult for the Company to procure coal under a long term contract due to no long term commitments and hence the Company has to rely more on spot purchases.
- 17.10. As per Section 5.14 of the QPPA, the company is permitted, subjected to the approval of CPPA-G to procure additional quantities of coal through spot market purchases if not available under the long-term Coal Supply Agreement. As per Section 5.2 of the QPPA, the quantum of the quarterly energy and coal requirements remain at the sole discretion of the power purchaser.
- 17.11. CPPCL further submitted that it believes that due to very short tenor of the order, no long-term agreement for coal supply may be available. Therefore, it submitted to inform the Authority that coal pricing mechanism for the instant project may not be competitive enough to match the prevailing mechanism for other large operators in Pakistan procuring coal on long term basis and that the Authority may please allow the company to procure coal from spot market with percent flexibility if coal unavailable or not meet the demand of the operation under the long term agreement.
- 17.12. The submissions of the Petitioner have been examined. The matter pertains to Power Purchase Agreement, therefore, the petitioner may take up this matter with parties to the agreement.

Sale of Energy During Commissioning Tests and Pre-COD Period

- 17.13. The Authority may please clarify that the payments required to be made subject to Section 8.7 of the QPPA will be allowed by the Authority during Commission Tests and pre-COD sale of energy (if any). Power Purchaser is responsible for paying for all fuel, chemicals, and consumables during plant testing, so the testing tariff is sought in Modification Petition by the Company.
- 17.14. The submission of the petitioner has been reviewed. The matter pertains to PPA, therefore, the same may be addressed in the PPA in line with other imported coal power projects. The same may be submitted to the Authority for approval.

Project Contingencies, Debt Service Reserve & Maintenance Reserve

- 17.15. Current tariff computation does not include Project contingencies, debt service reserve account and maintenance reserves. These should also be considered in calculation of the Project cost and tariff.



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17.16. The submission of the petitioner has been examined. No detail or supporting document has been provided by the petitioner to substantiate its request. Further, this issue was not raised by the petitioner in its modification petition and was therefore not made an issue for discussion during hearing. Therefore, the Authority has not considered the request of the petitioner.

SOFR & LIBOR

17.17. LIBOR is scheduled to exit the international market in June 2023. On this basis, lenders have indicated that the pricing of the loan to be obtained for the instant Project will most likely be based on SOFR plus a certain spread. As a result, the Authority may clarify that SOFR+spreads will be allowed to be adopted for the purpose of pricing senior debt.

17.18. The Authority has initiated proceeding in the matter of replacement of LIBOR with SOFR. The outcome of the proceeding will be applicable on the instant project as well.

Calculation of IDC

17.19. The Authority in determining that interest during construction is excluded from its calculation Sinosure fee and financing fees & charges which are Project cost items, must understand that a significant portion of the same is funded from senior debt and must therefore be included in the calculation of interest during construction and project cost along with Sinosure fee and financing fees & charges.

17.20. The submission of the petitioner has been examined. The Authority has not considered sinosure fee and financing fee & charges in the calculation of IDC in other projects. Accordingly, the Authority has decided to disallow the request of the petitioner.

18. SUMMARY OF PROJECT COST AND TARIFF

18.1. In accordance with decisions of the Authority in the preceding paragraphs and using current exchange rate, US CPI, NCPI (General), LIBOR and KIBOR, the summary of the approved project cost and tariff is as under:

Project Cost	Approved as on 31.05.2019 US\$ Mln	Revised Approved US\$ Mln
EPC Cost:		
Off-Shore Supply Contract	217.37	213.60
Onshore Construction & Services Contract (Allowed Rs. 20,162 Million as maximum amount in Pak Rupees. The amount is converted into USD for reference purpose only)	104.04	70.25
Custom Duties & Taxes	10.87	10.68
Non EPC Cost	5.77	5.77
Cost of Land (Allowed Rs. 496.322 Million as maximum amount in Pak Rupees. The amount is converted into USD for reference purpose only)	4.73	1.73
Project Development Cost (Allowed Rs. 1,102.6 Million as maximum amount in Pak Rupees. The amount is converted into USD for reference purpose only)	10.50	3.84
Insurance During Construction	2.41	2.13

Project Cost	Approved as on 31.05.2019 US\$ Mln	Revised Approved US\$ Mln
O&M Mobilization Cost	3.21	2.84
Pre-Sync Testing Cost	2.74	2.74
CAPEX	361.64	313.57
Financial Charges:		
Sinosure Fee during Construction	3.44	3.08
Financing Fees & Charges	5.79	5.02
Interest During Construction	28.57	36.64
Total Project Cost	399.43	358.30

18.2. The summary of revised approved tariff is provided hereunder:

Description	Tariff
Energy Charge (Rs./kWh):	
Fuel Cost Component	13.1675
Variable O&M (foreign)	0.2146
Variable O&M (Local)	0.1335
Total	13.5156
Capacity Charge (Rs./kW/hour):	
Fixed O&M (Local)	0.3487
Fixed O&M (Foreign)	0.6074
Cost of working capital	1.2617
Insurance	0.2385
SINOSURE Fee (Average) 1-13 Years	0.1379
SINOSURE Fee (Average) 14-30 years	-
Return on Equity During Construction	1.3534
Return on Equity	
Debt servicing (1-13 years only)	4.7420
Total 1-13 years	8.6895
Total 14-30 years	3.8097
Avg. Tariff 1-13 years @ 85% (Rs./kWh)	23.7386
Avg. Tariff 14-30 years @ 85% (Rs./kWh)	17.9976
Levelized tariff (Rs./kWh)	22.3431
Levelized tariff (Cents/kWh)	7.7823



19. ORDER

- I. The Authority hereby determines and approves the reference generation tariff along with terms & conditions for CIHC Pak Power Company Limited for its 300 MW coal Power Project at Gawadar and adjustments/indexations for delivery of electricity to the power purchaser. The schedule of tariff and debt servicing schedule are attached as Annex-I and Annex-II respectively

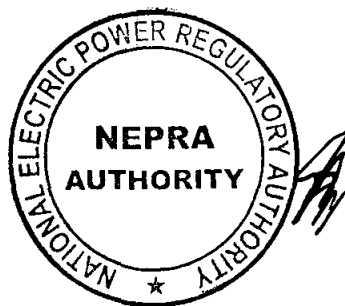
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II. One-Time Adjustment at COD

- a. Since the exact timing of payment to EPC contractor is not known at this point of time, therefore, an adjustment for relevant foreign currency fluctuation for the EPC portion of payment in the foreign currency shall be made against the reference exchange rate of Rs. 105/US\$ on the basis of actual payment. The adjustment shall be made only for the currency fluctuation against the reference parity value.
- b. The revised approved cost in local currency shall remain fixed and no further indexation/adjustment would be allowed on these costs in future.
- c. Adjustment as per actual with maximum cap of the cost allowed for, bridges, housing colony, site levelling, boundary wall, security cost, project development and company & Sponsor cost, Anti-Corrosion Measures and fuel & startup cost before synchronization
- d. In case NTDC do not validate the requirement of black start facility, the cost of US\$ 6.9 million on account of black start facility shall be excluded from the project cost at the time of COD adjustment of tariff
- e. Cost of construction power shall be adjusted for actual consumption during construction period and for any energy received from QESCO
- f. The Customs Duties and Cess shall be adjusted as per actual
- g. Adjustment of the cost of land on actual basis
- h. Adjustment of Sinosure fee as per actual with maximum of 0.6% of the yearly outstanding principal and interest amount during the construction period
- i. Adjustment as per actual of the Financing Fees & Charges subject to maximum of 2.0% of the debt amount
- j. The IDC shall be re-established at the time of COD on the basis of applicable LIBOR, actual premium, actual loan and actual loan drawdown
- k. ROE component of tariff shall be adjusted for variation in actual equity drawdown during the construction period

III. Adjustments Due to Performance Tests

Net efficiency and net output shall be subject to performance tests at the time of COD and in case the net efficiency and net output of the complex are established higher than the approved values, downward adjustments shall be made in fuel cost component and capacity charge components respectively. No adjustments shall be made in tariff components in case the net efficiency and net output of the complex are established lower than the approved values.



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IV. Adjustment in Insurance as per Actual

The actual insurance cost for the minimum cover required under contractual obligations with the Power Purchaser not exceeding 0.7% of the EPC cost shall be treated as pass through. Insurance component of reference tariff shall be adjusted annually as per actual upon production of authentic documentary evidence 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 US\$ 1.987 Million at Rs. 287.1/US\$
$P_{(Act)}$	=	Actual Premium or 0.7% of the EPC cost at exchange rate prevailing on the 1st day of the insurance coverage period whichever is lower

V. Indexations

The following indexations shall be applicable to the reference tariff:

i. Indexation of Return on Equity (ROE)

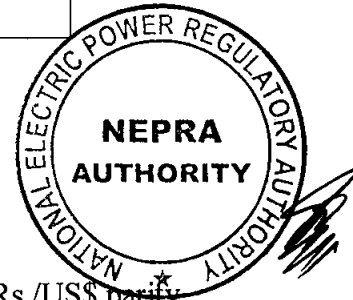
ROE component of tariff shall be quarterly indexed on account of variation in Rs./US\$ parity according to the following formula:

$ROE_{(Rev)}$	=	$ROE_{(Ref)} * ER_{(Rev)} / ER_{(Ref)}$
Where		
$ROE_{(Ref)}$	=	Reference ROE Component of the Tariff
$ER_{(Rev)}$	=	The revised TT & OD selling rate of US dollar as notified by the National Bank of Pakistan
$ER_{(Ref)}$	=	The reference exchange rate of Rs. 287.1/US\$

ii. Indexation applicable to O&M

O&M components of tariff shall be adjusted on account of local CPI, US CPI and exchange rate quarterly on 1 July, 1st October, 1st January and 1st April based on the latest available information with respect to CPI notified by the Pakistan Bureau of Statistics (PBS), US CPI (All Urban Consumers) issued by US Bureau of Labor Statistics and revised TT & OD selling rate of US Dollar notified by the National Bank of Pakistan as per the following mechanism:

F V. O&M _(Rev)	=	$F V. O\&M_{(Ref)} * US CPI_{(Rev)} / US CPI_{(Ref)} * ER_{(Rev)} / ER_{(Ref)}$
L V. O&M _(Rev)	=	$L V. O\&M_{(Ref)} * NCPI_{(Rev)} / NCPI_{(Ref)}$
L F. O&M _(Rev)	=	$L F. O\&M_{(Ref)} * NCPI_{(Rev)} / NCPI_{(Ref)}$
F F. O&M _(Rev)	=	$F F. O\&M_{(Ref)} * US CPI_{(Rev)} / US CPI_{(Ref)} * ER_{(Rev)} / ER_{(Ref)}$
Where:		
F V. O&M _(Rev)	=	The revised Variable O&M Foreign Component of Tariff
L V. O&M _(Rev)	=	The revised Variable O&M Local Component of Tariff
L F. O&M _(Rev)	=	The revised Fixed O&M Local Component of Tariff
F F. O&M _(Rev)	=	The revised Fixed O&M Foreign Component of Tariff
F V. O&M _(Ref)	=	The reference Variable O&M Foreign Component of Tariff
L V. O&M _(Ref)	=	The reference Variable O&M Local Component of Tariff



L F. O&M(REF)	=	The reference Fixed O&M Local Component of Tariff
F F. O&M(REF)	=	The reference Fixed O&M Foreign Component of Tariff
CPI(REV)	=	The revised NCPI (General)
CPI(REF)	=	The reference NCPI (General) for June 2023
US CPI(REV)	=	The revised US CPI (All Urban Consumers)
US CPI(REF)	=	The reference US CPI (All Urban Consumers) for June 2023
ER(REV)	=	The revised TT& OD selling rate of US dollar
ER(REF)	=	The reference TT& OD selling rate of RS. 287.1/US\$

iii. Indexation for LIBOR Variation

The interest part of capacity charge component will remain unchanged throughout the term except for the adjustment due to variation in interest rate as a result of variation in 3 months LIBOR according to the following formula:

ΔI	=	$P_{(REV)} * (LIBOR_{(REV)} - 5.54\%) / 4$
Where		
ΔI	=	The variation in interest charges applicable corresponding to variation in 3 months LIBOR. ΔI can be positive or negative depending upon whether $LIBOR_{(REV)}$ is $>$ or $<$ 2.60%. The interest payment obligation will be enhanced or reduced to the extent of ΔI for each quarter under adjustment applicable on quarterly basis.
$P_{(REV)}$	=	The outstanding principal (as indicated in the attached debt service schedule to this order) on a quarterly basis on the relevant period calculation date. Period 1 shall commence on the date on which the 1st installment is due after availing the grace period
$LIBOR_{(REV)}$	=	Revised 3 month LIBOR as at the last date of the preceding quarter

iv. Cost of Working Capital

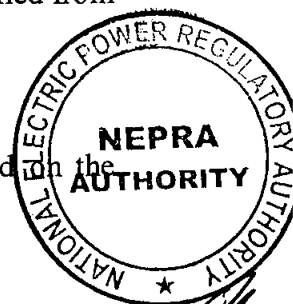
The cost of working capital shall be adjusted quarterly for variation in KIBOR and fuel price.

v. Fuel Price Adjustment

The fuel cost component of tariff subsequent to adjustment of heat rate test at COD shall be adjusted on account of fuel price variation in accordance with the mechanism stipulated in the decision of the Authority dated 23rd September 2016 modified from time to time.

vi. SINOSURE Fee

Sinosure fee component of tariff during operation will be adjusted based on the revised principal and interest components.



VI. Clawback Mechanism

It is to be noted that the approved ROE amount shall be the maximum limit of the annual equity return to be earned by the project company. The amount of ROE of any year, if exceeds by the given limit, shall be shared between the power producer and consumers through claw back formula to be decided by the Authority under the relevant framework.

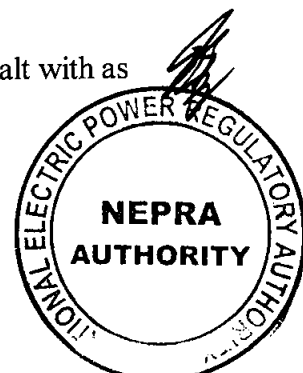
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VII. TERMS & CONDITIONS

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

- i. All plant and equipment shall be new and shall be designed, manufactured and tested in accordance with the acceptable standards
- ii. The verification of the new machinery will be done by the independent engineer at the time of the commissioning of the plant duly verified by the power purchaser
- iii. The tariff has been determined on the basis of debt equity ratio of 80:20. For equity share of more than 20%. For equity share of more than 20%, allowed IRR shall be neutralized for the additional cost of debt:equity ratio
- iv. The sponsor of the project can arrange foreign financing in American Dollar (\$), British Pound Sterling (£), Euro (€) and Japanese Yen (¥) or in any currency as the Government of Pakistan may allow
- v. Debt servicing & Sinosure fee components of tariff shall be applicable for the 1st twelve and a half years of the tariff control period
- vi. The plant availability shall be 85%
- vii. The tariff control period shall be 30 years from the date of commercial operation.
- viii. The dispatch will be at appropriate voltage level mutually agreed between the power purchaser and the power producer
- ix. The dispatch shall be in accordance with economic merit order
- x. CPPA-G is directed to agree COD timelines keeping in view the timelines for interconnection with local grid and interlinking of the project with national grid. In case there exist a mismatch between the COD of the project and availability of the national grid for interlinking of the project resulting in idle capacity charges to the project, specific approval shall be sought from the appropriate forum for passing on the same to the end consumers
- xi. 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.
- xii. 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 PPA.
- xiii. General assumptions, which are not covered in this determination, may be dealt with as per the standard terms of the Power Purchase Agreement.

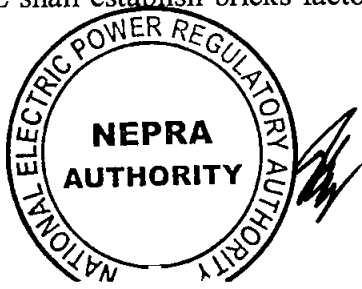
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VIII. CSR Activities

The Petitioner shall ensure completion of following CSR activities communicated vide letter No. CIHC/POCPEC/2018-186 dated 19th November 2018:

- i. CPPCL will comply with various federal, state, and local community regulations.
- ii. CPPCL will recruit law-abiding corporate citizens for the development of the local communities.
- iii. CPPCL will provide services to the local communities that at least meet minimal legal requirements
- iv. CPPCL is bound to observe health and safety and healthy working conditions
- v. CPPCL follows non-discriminatory employment policy
- vi. CPPCL will construct a training centre for fishermen of Gawadar District to uplift their life style and to increase their business activities
- vii. Tree plantation shall be carried out by CPPCL, the figure would be commonly concurred amongst CPPCL and GOB
- viii. The company will provide solar energy panels to the surrounding communities
- ix. The maximum number of unskilled and skilled occupations will be given to local people preferably Gawadar District and then of Makran and different parts of Baluchistan Province.
- x. Small contracts and use of logistic services like dumpers, tractors, water tankers shall be given to the local community based on transparency and fair competitiveness
- xi. The CPPCL will build up a school for boys and girls in vicinity of power plant. The running of the school shall be carried out with the assistance of GOB and concerned organization.
- xii. The Company will look after the health, general medical, education, mobility, dignity and different needs of 100 debilitate individuals of both genders from local families of Gwadar. The selection criteria will be finalized in consultation with steering committee.
- xiii. CPPCL will contribute a certain level of profit after an assessment on CSR i.e. wellbeing, education, occupation and other community welfare activities.
- xiv. CPPCL will give preferential employment to local communities and other parts of Baluchistan. Local Engineers will be also hired for the power plant operations, and local engineers will also be sending to China to get them trained in relevant fields.
- xv. CPPCL shall meet the national environmental protection emission standards of Pakistan in line with international standards
- xvi. CPPCL shall ensure that the marine life feeding, resting or reproductive habitat is not harmed and their ability to survive is ensured.
- xvii. CPPCL shall carry out training and awareness of waste handling workers
- xviii. CPPCL shall adhere to the concerns of the GOB regarding CSR and environmental health issues
- xix. CPPCL shall establish bricks factories for recycling of ash produced from the Power Plant



As noted 9



NOTIFICATION:

The above Order of the Authority along with Annexes shall be notified in the Official Gazette in terms of Section 31(7) of the Regulations of Generation, Transmission and Distribution of Electric Power Act, 1997

AUTHORITY

Mathar Niaz Rana

Mathar Niaz Rana (nsc)
Member

Engr. Maqsood Anwar Khan

Engr. Maqsood Anwar Khan
Member

My opinion is attached

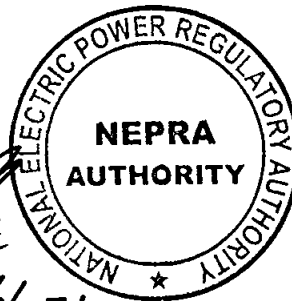
Engr. Rafique Ahmed Shaikh

Engr. Rafique Ahmed Shaikh
Member

Amina Ahmed

Amina Ahmed
Member

Tauseef H. Farooqi
Chairman



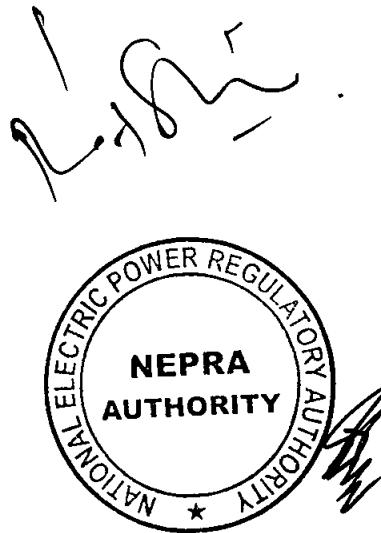
26/07/23

Although development of base load power plant at Gawader is necessary for economic development of the port city and uplift of the social life in the area. However, I strongly believe that the project should be allowed on local coal as the primary energy source.

In case local coal is not available by the time of COD, the power plant may be allowed to use imported coal, but this arrangement should not exceed three years from the Commercial Operation Date (COD). The petitioner should start negotiations with the local coal authorities for arrangement of local coal. Lucky Electric has successfully demonstrated operation of its plant on a mix of local/imported coal.

Further, it is highly expected that the power plant's utilization rate will be lower in the initial years of operation, therefore, considering the economic rate of return the possibility of providing a subsidy on the generation tariff can also be explored.

As per the information provided, the investment plan submitted by NTDC to NEPRA doesn't include any cost related to evacuation of power from Gwadar, therefore, NTDC shall ensure that the power plant will not be underutilized due to transmission constraints and any additional costs due to transmission constraints shall be borne by NTDC.



**CIHC PAK POWER COMPANY LIMITED
REFERENCE TARIFF TABLE**

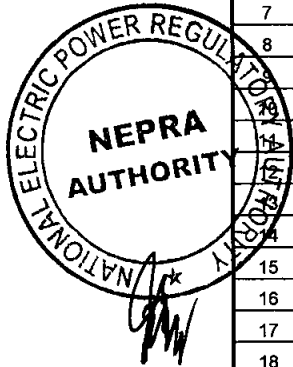
Year	Energy Purchase Price (Rs./kWh)				Capacity Purchase Price (PKR/kW/Hour)									Capacity Charge@ 85%	Total Tariff	
	Fuel Cost Component	Var. O&M		Total EPP	Fixed O&M		Cost of W/C	Insurance	ROE	Sinosure Fee	Debt Repayment	Interest Charges	Total CPP		Rs. /kWh	Cents/kWh
		Foreign	Local		Local	Foreign										
1	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	0.2258	1.5118	3.2302	8.7775	10.3264	23.8420	8.3044
2	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	0.2158	1.6613	3.0806	8.7675	10.3147	23.8303	8.3003
3	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	0.2049	1.8256	2.9163	8.7566	10.3018	23.8174	8.2959
4	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	0.1928	2.0062	2.7358	8.7445	10.2877	23.8032	8.2909
5	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	0.1796	2.2046	2.5374	8.7313	10.2721	23.7877	8.2855
6	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	0.1651	2.4226	2.3194	8.7168	10.2550	23.7706	8.2795
7	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	0.1491	2.6622	2.0798	8.7008	10.2362	23.7518	8.2730
8	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	0.1316	2.9255	1.8165	8.6832	10.2156	23.7311	8.2658
9	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	0.1123	3.2148	1.5271	8.6639	10.1929	23.7084	8.2579
	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	0.0911	3.5328	1.2092	8.6427	10.1679	23.6835	8.2492
	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	0.0678	3.8822	0.8598	8.6194	10.1405	23.6561	8.2397
	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	0.0422	4.2661	0.4759	8.5939	10.1104	23.6260	8.2292
	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	0.0142	4.5775	0.1645	8.5659	10.0775	23.5931	8.2177
	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687
	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687
	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687
	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687
	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687
15	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687
16	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687
17	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687
18	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687
19	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687
20	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687
21	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687
22	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687
23	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687
24	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687
25	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687
26	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687
27	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687
28	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687
29	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687
30	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687

Average

1-13	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	0.1379	2.8225	1.9194	8.6895	10.2230	23.7386	8.2684
14-30	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	-	-	-	3.8097	4.4820	17.9976	6.2687
1-30	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	0.0597	1.2231	0.8317	5.9243	6.9698	20.4853	7.1353

Levelized

1-30	13.1675	0.2146	0.1335	13.5156	0.3487	0.6074	1.2617	0.2385	1.3534	0.1205	1.8805	1.6926	7.5034	8.8275	22.3431	7.7823
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Levelized Tariff = 22.3431 Rs./kWh**7.7823 USc/kWh**

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22 Mar 08

CIHC PAK POWER COMPANY LIMITED
Debt Servicing Schedule

Gross Capacity (MW)	300.00	Rs./US\$ Parity	287.10
Net Capacity (MW)	273.06	Debt (US\$ Million)	286.64
LIBOR	5.54%	Debt (Rs. Million)	82,295.31
Spread over LIBOR	4.00%		
Total Interest Rate	9.54%		

Period	Principal	Principal Repayment	Interest	Balance Outstanding	Debt Servicing	Principal Repayment	Interest	Debt Servicing
	US\$ Min.	US\$ Min.	US\$ Min.	US\$ Min.	US\$ Min.	Rs./kW/h	Rs./kW/h	Rs./kW/h
1	286.64	3.04	6.84	283.60	9.88			
2	283.60	3.11	6.77	280.49	9.88			
3	280.49	3.19	6.69	277.31	9.88			
4	277.31	3.26	6.62	274.05	9.88	1.5118	3.2302	4.7420
1st Year		12.60	26.91		39.51			
5	274.05	3.34	6.54	270.71	9.88			
6	270.71	3.42	6.46	267.29	9.88			
7	267.29	3.50	6.38	263.79	9.88			
8	263.79	3.58	6.29	260.21	9.88	1.6613	3.0806	4.7420
2nd Year		13.84	25.67		39.51			
9	260.21	3.67	6.21	256.54	9.88			
10	256.54	3.76	6.12	252.78	9.88			
11	252.78	3.85	6.03	248.93	9.88			
12	248.93	3.94	5.94	245.00	9.88	1.8256	2.9163	4.7420
3rd Year		15.21	24.30		39.51			
13	245.00	4.03	5.84	240.96	9.88			
14	240.96	4.13	5.75	236.84	9.88			
15	236.84	4.23	5.65	232.61	9.88			
16	232.61	4.33	5.55	228.28	9.88	2.0062	2.7358	4.7420
4th Year		16.71	22.79		39.51			
17	228.28	4.43	5.45	223.85	9.88			
18	223.85	4.54	5.34	219.31	9.88			
19	219.31	4.64	5.23	214.67	9.88			
20	214.67	4.76	5.12	209.91	9.88	2.2046	2.5374	4.7420
5th Year		18.37	21.14		39.51			
21	209.91	4.87	5.01	205.04	9.88			
22	205.04	4.99	4.89	200.06	9.88			
23	200.06	5.10	4.77	194.96	9.88			
24	194.96	5.23	4.65	189.73	9.88	2.4226	2.3194	4.7420
6th Year		20.18	19.32		39.51			
25	189.73	5.35	4.53	184.38	9.88			
26	184.38	5.48	4.40	178.90	9.88			
27	178.90	5.61	4.27	173.29	9.88			
28	173.29	5.74	4.13	167.55	9.88	2.6622	2.0798	4.7420
7th Year		22.18	17.33		39.51			
29	167.55	5.88	4.00	161.67	9.88			
30	161.67	6.02	3.86	155.65	9.88			
31	155.65	6.16	3.71	149.49	9.88			
32	149.49	6.31	3.57	143.18	9.88	2.9255	1.8165	4.7420
8th Year		24.37	15.13		39.51			
33	143.18	6.46	3.42	136.71	9.88			
34	136.71	6.62	3.26	130.10	9.88			
35	130.10	6.77	3.10	123.33	9.88			
36	123.33	6.93	2.94	116.39	9.88	3.2148	1.5271	4.7420
9th Year		26.78	12.72		39.51			
37	116.39	7.10	2.78	109.29	9.88			
38	109.29	7.27	2.61	102.02	9.88			
39	102.02	7.44	2.43	94.58	9.88			
40	94.58	7.62	2.26	86.96	9.88	3.5328	1.2092	4.7420
10th Year		29.43	10.07		39.51			
41	86.96	7.80	2.07	79.15	9.88			
42	79.15	7.99	1.89	71.17	9.88			
43	71.17	8.18	1.70	62.99	9.88			
44	62.99	8.37	1.50	54.61	9.88	3.8822	0.8598	4.7420
11th Year		32.34	7.16		39.51			
45	54.61	8.57	1.30	46.04	9.88			
46	46.04	8.78	1.10	37.26	9.88			
47	37.26	8.99	0.89	28.27	9.88			
48	28.27	9.20	0.67	19.07	9.88	4.2661	0.4759	4.7420
12th Year		35.54	3.96		39.51			
49	19.07	9.42	0.45	9.65	9.88			
50	9.65	9.65	0.23	(0.00)	9.88	4.5775	0.1645	4.7420
13th Year		19.07	0.69		19.75			

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