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No. NEPRA/ADG(Trf)/TRF-408/PTPL-2017/ **17210-14**

October 27, 2025

Subject: **Decision of the Authority in the matter of Tariff Modification Petition filed by Punjab Thermal Power (Private) Limited for its 1263.2 MW RLNG/HSD Power Plant at Jhang**

Enclosed please find herewith the subject Decision of the Authority alongwith **Annex-I, II, III & IV** (total 44 Pages) regarding tariff Modification Petition filed by Punjab Thermal Power (Private) Limited for its 1263.2 MW RLNG/HSD Power Plant at Jhang in Case No. NEPRA/TRF-408/PTPL-2017.

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

Enclosure: **As above**

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

(Iftikhar Ali Khan)

Copy to:

1. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad
2. Mr. Shehriyar Abbasi, Deputy Secretary, Cabinet Division, Cabinet Secretariat, Islamabad
3. Chief Executive Officer, Central Power Purchasing Agency Guarantee Limited, Shaheen Plaza, 73-West, Fazl-e-Haq Road, Islamabad.
4. Chief Executive Officer, Punjab Thermal Power (Private) Limited, 1st Floor, 7-C-1, Gulberg III, Lahore

**DECISION OF THE AUTHORITY IN THE MATTER OF TARIFF
MODIFICATION PETITION FILED BY PUNJAB THERMAL POWER (PVT.)
LIMITED FOR ITS 1263.2 MW RLNG/HSD POWER PLANT AT JHANG**

1. BACKGROUND

- 1.1. Punjab Thermal Power (Private) Limited (PTPL), having Generation License No. IGSPL/97/2018 dated 15-02-2018, is wholly owned company of the Government of Punjab (GoPb) incorporated under the Companies Act, 2017 to act as an IPP to set up a combined cycle power project of 1,263.20 MW (net 1,242.70 MW) on Re-gasified Liquefied Natural Gas (RLNG) as the primary fuel and High-Speed Diesel (HSD) as back-up fuel at District Jhang, Punjab.
- 1.2. PTPL was granted a generation tariff vide determination dated 26-12-2017. Review motion was decided on 07-06-2018. The Petition for revision of its tariff to reduce the Return on Equity (RoE) from 15% to 12% was decided on 24-02-2021. The reference and current indexed tariff on RLNG fuel for Jul-Sep 2025 quarter is provided hereunder:

Tariff Components	Reference	Indexed
Fixed O&M – Local	0.0631	0.1562
Fixed O&M - Foreign	0.1041	0.3505
Cost of Working Capital	0.0922	0.4789
Insurance	0.0531	0.0531
ROE	0.2562	0.6623
Debt Servicing	0.8111	1.0396
Total	1.3798	2.7406
Energy Charge (Rs./kWh)		
Fuel Cost Component*	5.6005	19.0511
Variable O&M – Foreign	0.3079	1.0367
Total	5.9084	20.0878
RLNG Price (Rs./MMBTU)	906.28	3,082.8705

*Fuel cost component is adjusted on the basis of weekly price



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2. FILING OF MODIFICATION PETITION

2.1. PTPL vide letter No. PTPL/CEO/8475/2024 dated 28-06-2024 filed petition for modification of generation tariff. The Petitioner requested to modify tariff on account of the following:

Component	Already allowed	Requested
	USD million	
Financing Fee & Charges	14.776	19.700
IDC	36.285	41.467
Simple Cycle Availability Period cost	-	9.091
Administrative Expenses during construction	10.995	15.564
insurance cost (operational period)	5.257	5.960
Testing and Commissioning Cost	10.327	18.712
Electricity connection cost	-	0.091
Security Surveillance cost	7.986	9.446
O&M mobilization & Training cost	5.257	7.870
Technical Modifications and Upgrade cost	-	36
Audit & Development of Policies (one-time cost)	-	0.15
Cyber Security (annual recurring cost)	-	0.20
BOP Spares cost	1.710	7.501

- i. The Petitioner requested for correction in KIBOR Indexation Formula for Debt Service Component to the extent of denominator i.e. 2 to replace by 4.
- ii. The Petitioner requested to allow insurance cost capped at 1% of the Capital Cost i.e. USD 5.960 million or alternatively, allow insurance cost capped at 0.75% of the Replacement value determined by the Independent Valuer subject to following:
 - a. To allow premium payment on "actual" basis instead of fixing the exchange rate prevailing on the 1st day of the insurance coverage period for the actual payment whichever is lower.
 - b. To allow cost of working capital on the funds utilized for insurance premium payment.

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- iii. The Petitioner requested to allow partial load impact on the variable O&M component.
- iv. The Petitioner requested to allow DSRA SBLC cost and Lenders advisory fee as pass through.

2.2. According to the Petitioner, in the Tariff Determination and the Review Determination, the Authority had allowed a construction period of 26 months. The COD of the Project was achieved on June 23, 2023 against contracted COD of November 29, 2019 under the EPC Agreement. During this time, there are various claims raised by the EPC Contractor seeking extension of time, which the Petitioner has not accepted. The Parties are at the stage of Dispute Adjudication Board proceedings to determine such claims. On account of such claims and other claims (e.g. force majeure, third party, etc.) once they can be ascertained, a modification to the extent of construction period be allowed by the Authority and the tariff components associated therewith, may also be required to allow by the Authority for all prudent costs incurred by the Petitioner. According to the Petitioner, PTPL will approach the Authority for consideration and modification of the construction period and relevant tariff components.

2.3. The Petitioner requested a Levelized tariff of 11.4952 US Cents/kWh on HSD and 6.5385 US Cents/kWh on RLNG respectively. The incremental financial impact on reference tariff is Rs. 0.0846/kWh on RLNG and Rs. 0.0971/kWh on HSD.

3. ADDENDUMS TO THE MODIFICATION PETITION

3.1. PTPL vide its Addendum dated 4th September 2024 requested to allow the PPIB Annual fee in pursuance of the applicable rules made from time to time, as a pass through item. The Authority initiated suo moto proceedings in the matter and separate decision has already been issued on 7th July 2025 which is applicable to all IPPs processed through PPIB including PTPL.

3.2. PTPL vide its addendum 2 dated 6th February 2025 requested cost of working capital on actual number of days funds remained tied up from the date payment of taxes made to the authorities till the invoice to the Power Purchaser become due.

4. ADMISSION OF MODIFICATION PETITION

4.1. The Authority admitted the subject modification petition on 2-08-2024. Notice of Admission along with salient features was made public on 17th August 2024.

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5. COMMENTS OF STAKEHOLDERS

5.1. In response to the notice of admission, CPPA-G vide letter dated 7th October 2024 submitted the comments in the matter. The same were shared with the Petitioner for reply/rejoinder. The Petitioner vide its email dated 28th March submitted rejoinder/reply in the matter.

6. HEARING

6.1. Hearing in the matter was scheduled on 13th February 2025. Notice of hearing was published on 30th January 2025.

6.2. Following issues were framed for the hearing:

- i. Whether the requested Financing Fee and charges of USD 19.700 million @ 3.5% against USD 14.776 million @ 3% is justified?
- ii. Whether the requested IDC cost of USD 41.467 million against USD 36.285 million is justified?
- iii. Whether the requested correction in KIBOR indexation formula for debt service component is justified?
- iv. Whether the costs for the DSRA SBLC facility and lender advisory fees can be treated as pass-through?
- v. Whether the requested one time Simple Cycle Availability Period cost of USD 9.091 million is justified?
- vi. Whether the requested Administrative Expenses during construction of USD 15.564 million against USD 10.995 million is justified?
- vii. Whether the requested insurance cost of USD 5.960 million against USD 5.257 million is justified?
- viii. Whether the requested Testing and Commissioning Cost of USD 18.712 million against USD 10.327 million is justified?
- ix. Whether the requested electricity connection cost of USD 0.091 million is justified?
- x. Whether the requested Security Surveillance cost of USD 9.446 million against USD 7.986 million is justified?
- xi. Whether request to allow partial load impact on the variable O&M component is justified?

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- xii. Whether the requested O&M mobilization & Training cost of USD 7.870 million against USD 5.257 million is justified?
 - xiii. Whether the request to allow Technical Modifications and Upgrade cost of 36 million for twelve years subject to actualization based on signed and executed agreement for Extra works at the time of one-time adjustment (true-up) pertaining to COD is justified?
 - xiv. Whether the request to allow one-time cost for Audit & development of policies of USD 150,000/- and annual recurring cost of USD 200,000/- for Cyber Security insurance as part of O&M is justified?
 - xv. Whether the request to allow BOP Spares cost of USD 7.501 million against USD 1.710 million is justified?
 - xvi. Any other relevant issue arising during the proceedings
- 6.3. Hearing in the matter was held as per schedule and was participated by the representatives from the Petitioner and CPPA-G.

7. CONSIDERATION OF VIEWS OF THE STAKEHOLDERS, DISCUSSION, ANALYSIS AND DECISIONS ON IMPORTANT ISSUES

- 7.1. The issue wise discussion, submissions of stakeholders, analysis and decisions are provided in the succeeding paragraphs.

8. Whether the requested Financing Fee and charges of USD 19.700 million @ 3.5% against USD 14.776 million @ 3% is justified?

- 8.1. According to the Petitioner, the Authority allowed financing fees and charges at 3% of the debt amount which shall be subject to actualization with maximum cap as against the requested 3.5% of the debt amount. The Authority maintained its decision in the review. The Petitioner again requests the Authority to modify the tariff and allow 3.5% or actual costs for financing fees and charges on the following grounds:

- (a) In a similar Bhikki project, 3.5% was allowed. Hence, it would not be possible for the Petitioner to manage the fees within 3%. Not allowing the same benchmark will put the Project in a prejudicial position as compared to such similarly placed projects.
- (b) The benchmarking to Thar coal upfront tariff is misplaced and such projects may manage savings from other tariff components. Moreover, the Thar Coal project is also allowed 7% Sinasure fee in addition to the financing fee and

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charges of 3% (total 10%) in case of foreign financing, making it incomparable to the Petitioner's Project.

- (c) The financing fees and charges have a link with the perceived risk assessment of a project. In the instant case, the Lenders' perceived risk of the project increased from the inception till financial close due to removal of minimum dispatch under PPA/GSA, reduction in ROE from 15% to 12% and several other developments (including but not limited to applicability of Commercial Code, IPP's Inquiry Report, etc.)
- (d) Due to the challenging circumstances mentioned above, the Lenders also required additional works to be performed which were neither envisaged nor requested / claimed in the Tariff Petition such as bi-annual credit rating, certification for actual project cost incurred until financial close is achieved, auditor's certification for compliance of covenants prior to each disbursement, re-due diligence by the Lenders' Advisor due to elimination of minimum 66% dispatch requirement, Gas take or Pay and NPD evaluation, additional legal due diligence and re-drafting of financing and security documents due to enactment of new legislation, i.e. the Punjab Trusts Act in 2020, and review of Lender's reinsurer assignment deeds considering the involvement of NICL/PRCL instead of direct insurance arrangement with the reinsurer/brokers. This also led to a further increase in costs.
- (e) Additional LC costs were also incurred attributable to unprecedented currency devaluation and extended construction period which was not envisaged.

8.2. According to the Petitioner, PTPL will also submit supporting documentation for the actual costs incurred in this regard for verification. The Petitioner requested the Authority to allow the financing fees and charges on actual (after verification), or at a bare minimum and in the interest of justice and fairness, 3.5% of the total debt amount as allowed to similarly placed projects.

8.3. CPPAG vide its comments submitted that any adjustment in the Financing Fee must be made in accordance with the parameters set out in the approved Tariff Determination i.e. adjustment as per actual subject to the cap of 3% of the debt amount.

8.4. The submissions of the Petitioner have been examined. The reasons underlying the requested increase are not convincing at all. The comparison with foreign financing of the coal projects and sinosure fee is misplaced. The appropriate comparison

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would have been with local financing of thar coal projects which were also allowed 3% of financing fees and charges as compared to earlier thar coal upfront tariff with 3.5% financing fees and charges. The Petitioner could not submit its actual expenditure on this account even after a lapse of approximately two years from COD. As per tariff guidelines of 2018, the benchmark financing fees and charges are 2% for thermal power projects. Moreover, this is a government of Punjab backed loan arrangement and should have come up with better terms as compared to a project financing in a private sector IPP. The Authority has decided to maintain its earlier decision in the matter.

8.5. Further, the Petitioner also requested to calculate financing fees and charges on the basis of total loan amount instead of 75% of the capex only. The calculation of estimated financing fees and charges at 3% on 75% of the capex amount is a standard practice which is subject to adjustment as per actual with maximum of 3% of the loan amount at the time of COD tariff true up request. Similar treatment has been done in the previous 3 similar projects and many other projects which then were adjusted on the basis of total loan amount at the time of COD tariff true up. However, the financing fees and charges may be recalculated on the basis of total loan amount as requested by the Petitioner under the instant modification petition. Accordingly, on the basis of revised project cost of US\$ 714.982 million and estimated total loan amount of US\$ 536.236 million, financing fees and charges @3% works out US\$ 16.087 million and the same is being approved. Financing fees and charges shall be subject to actualization on the basis of verifiable documentary evidence with maximum of 3% of the total loan amount.

9. Whether the requested IDC cost of USD 41.467 million against USD 36.285 million is justified?

9.1. According to the Petitioner, PTPL earlier requested the Authority to allow interest During Construction (IDC), which in the ordinary course of business, is always part of the Project Cost and, hence, is an integral part of the total debt amount established at the time of COD Tariff Adjustment. However, the Authority's Determination of IDC and financing fees on the debt amount is based on 75% of CAPEX cost (i.e. excluding the IDC and Financing fees & charges) instead of 75% of total Project Cost. According to the Petitioner, the IDC and financing fee, based on the requested parameters, would then work out to be USD 55.366 million as compared to the previously determined amount of USD 51.06 million, while keeping all other parameters / assumptions unchanged.

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- 9.2. According to the Petitioner, it does understand that the Authority had already determined that the IDC shall be re-established at the time of COD on the basis of applicable KIBOR, actual premium, actual loan and actual loan drawdown, however, COD Tariff True up adjustment generally take considerable time. Hence, the Petitioner till such time will remain exposed to cash flow constraints, as the determined project cost is less than what it should have been. Hence, there will be a consistent shortfall between the actual debt service amounts versus the determined amount. It is, therefore, requested that the said modification / rectification be made now and allow IDC of USD 39.345 million and financing fee of USD 16.021 million instead of previously determined IDC of USD 36.285 million and financing fee of USD 14.776 million in Reference Tariff Determination.
- 9.3. The Petitioner further submitted that the IDC and financing fee & charges would be further increased to USD 41.47 million and USD 19.7 million respectively after taking into the account the impact of modification of various costs requested in this Petition. The Petitioner requested to revise the computation of IDC and financing fee & charges and allow USD 41.47 million and USD 19.7 million respectively.
- 9.4. CPPA-G in its comments w.r.t. IDC cost submitted that the petitioner has not presented any new evidence and has instead challenged NEPRA's financial modelling structure for power projects. Adopting a different approach could set a precedent, potentially leading to numerous modification requests from other power projects. Therefore, CPPA-G believes that the financial model used for other RLNG projects should continue to apply to this project.
- 9.5. The submissions of the Petitioner have been examined. In a nutshell, the Petitioner requested to recalculate financing fee and charges on the basis of total loan amount instead of 75% of capex and recalculate IDC after inclusion of the financing fee and charges in the loan amount instead of 75% of capex amount only. The calculation of estimated IDC on 75% of the capex amount is a standard practice which is subject to adjustment as per actual of the loan amount at the time of COD tariff true up request. Similar treatment has been done in the previous 3 similar projects and many other projects which was adjusted on the basis of total loan amount at the time of COD tariff true up. Similar request of Gawadar 300MW coal project in the tariff modification decision dated 2nd October 2024 has been entertained. Accordingly, the Authority has decided to recalculate IDC on the basis of loan amount after inclusion of financing fees and charges. The IDC works out US\$ 37.437 million on the basis loan amount of US\$ 508.158 million comprising 75% of revised CAPEX and financing fees and charges. The issue of recalculation of financing fees and charges has been discussed under the previous issue and recalculation has been

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made as requested by the Petitioner. IDC shall be re-established at the time of COD on the basis of actual interest rate, actual loan and actual drawdowns.

10. Whether the requested correction in KIBOR Indexation Formula for Debt Service Component is justified?

10.1. According to the Petitioner, through reference tariff petition while claiming Debt Service Component, PTPL requested the interest part of the debt-servicing component to be quarterly indexed to the 3-month KIBOR whereas the debt repayment instalment (Principal + Interest) shall be made semi-annually. The Authority considered the request which was in line with the financing term agreed with the Financier (mentioned in the term sheet submitted along with the Petition) and past precedent of QATPL. Accordingly, the Authority in its determination allowed Indexation for KIBOR variation of 3-months KIBOR but erroneously same could not be reflected in the formula mentioned in the determination. According to the Petitioner, the approved formula is as under:

$$\Delta I = P_{(REV)} * (KIBOR_{(REV)} - 6.14\%) / 2$$

10.2. The Petitioner requested to note that debt servicing is on a semi-annual basis, whereas, the applicable interest is 3-month's KIBOR which is to be indexed on a quarterly basis. However, the formula shown above for the indexation is not aligned with the said principle mentioned in the determination i.e. the denominator should have been 4 instead of 2 in the above-mentioned formula. Accordingly, PTPL requested that the anomaly be rectified in the Tariff and following formula be allowed for Indexation for KIBOR variation.

$$\Delta I = P_{(REV)} * (KIBOR_{(REV)} - 6.14\%) / 4$$

10.3. CPPA vide its comments also submitted that the mechanism/formulae in the Tariff Determination should be consistent with the Financing Documents to ensure transparency and prevent any financial gain or loss to the Company.

10.4. The submissions of the Petitioner have been evaluated. Apparently, there is no mistake in the formula. Since the debt servicing is being made on six monthly basis, therefore, variation is also being calculated on the basis of 6 months and accordingly 2 (biannually) in the denominator is being used instead of 4 (quarterly). The Petitioner was asked to share relevant financing documents in support of its claim. The Petitioner shared Syndicate Term Finance Facility Agreement, 4th Debt Repayment Invoice and interest calculation sheet for the said invoice. The Illustrative Payment Schedule on page 18 of the facility agreement is similar to that

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allowed in the approved tariff i.e. biannual repayments and interest calculation on the basis of 6 months instead of quarterly calculation. However, the definition of Base Rate, invoice for 4th repayment and interest calculation sheet accounts for interest rate prevailing on each quarter which means that debt servicing shall be made biannually on 30th June and 31st December each year but the interest shall be calculated separately for each quarter on the basis of prevailing mark-up rate.

- 10.5. Concisely, the issue emerged is the application of two separate interest rates for each quarter of the biannual period as per financing documents instead of one interest rate for the entire biannual period (6 months) as provided in the approved tariff. The solution to the problem is to add a definition of KIBOR_(REV) instead of change from 2 to 4 in the denominator suggested by the Petitioner. Accordingly, the Authority has decided to include following definition to the mechanism for indexation of KIBOR variation to bring it in line with the financing documents:

KIBOR _(REV)	=	Average of the KIBOR prevailing on the last date of the preceding two quarters
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11. **Whether the costs for the DSRA SBLC facility and lender advisory fees can be treated as pass-through?**

- 11.1. The Petitioner requests to allow the financing cost associated with the DSRA SBLC and Lenders' and their Advisors' Fee as pass through item. According to the Petitioner, providing a Debt Service Reserve Account (DSRA) Support equivalent to the one instalment of debt servicing is a standard financing requirement (locally and internationally) for Project Financing in the power sector. Accordingly, the Project Financiers also required DSRA Support under the Financing Documents. In order to meet the said requirement, DSRA Support was arranged in the form of SBLC from the Bank of Punjab (BOP) at a fee of 2.9% per annum of the DSRA facility amount. The aforesaid facility has to be maintained over the tenor of the project finance facility (i.e. 10 years from the start of first repayment date) and secured against Provincial Guarantee and Debit Authority of the equivalent amount. According to the Petitioner, such cost was not claimed earlier in any other head, therefore, the same cannot be funded from the currently allowed tariff. Hence, if the same is not allowed separately then it will have to be funded from the ROE which is against the spirit of cost-plus tariff on which the Project is executed.

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- 11.2. The Petitioner further submitted that DSRA SBLC financing cost and lender's advisors fee is recurring and not one time which is aligned with the debt servicing tenor, hence, the same should be allowed as a pass-through item during the term of debt at actual on yearly basis subject to provision of authentic documentary evidence, as per past precedent of the Authority in case of UCH-II.
- 11.3. CPPA-G vide its comments submitted that the Company's comparison with Uch-II regarding DSRA SBLC financing costs is inappropriate, as Uch-II is funded by foreign financiers. A more suitable comparison would be with QATPL, which is also owned by the Government of Punjab and has a similar capacity and structure. Since DSRA has not been allowed for other government-owned power projects, permitting it here would set an unfavourable precedent for the power sector. The Company should, like other IPPs, manage its requirements through project cash flows. CPPA-G understands that all these components are already covered under the maximum 3% Cap of Debt Amount and should be arranged by the Company. CPPA-G is of the view that the Company may be allowed similar treatments to QATPL and NPPMCL.
- 11.4. The submissions of the Petitioner have been examined. Such cost has not been allowed to any other power plant having project financing from commercial local or foreign bank except in a one-off case which cannot be quoted as precedent when there are numerous cases where such cost was not allowed. Therefore, agreeing with the comments of power purchaser, the Authority has decided to disallow the subject cost in line with other projects.

12. Whether the requested one time Simple Cycle Availability Period cost of USD 9.091 million is justified?

- 12.1. According to the Petitioner, PTPL was required under the PPA to achieve Commissioned GT1 and Commissioned GT2 (Simple Cycle COD) prior to the commissioning of the Facility as a whole and make the same available in Simple Cycle mode for generation of electricity to the national grid. Further the generation on simple cycle was also allowed under the Tariff Determination for a maximum period of Three Hundred Forty-Nine (349) Days before COD of the Complex / Facility. Accordingly, the Simple Cycle COD GT1 was achieved on July 27, 2022 and Simple Cycle COD GT2 on August 04, 2022. Subsequently, the Petitioner mobilized O&M and LTSA Contractors for the Simple Cycle phase so that the Petitioner could maintain the power plant and operate it as and when required by the System Operator / Power Purchaser for Simple Cycle Operations.

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- 12.2. The Petitioner further submitted that to procure RLNG for Simple Cycle operations, the Petitioner had to arrange working capital facilities as well as SBLC for gas supplier which was required to be provided 15 days before the supply of RLNG/gas as a security deposit in term of the Gas Supply Agreement (GSA). The Petitioner during the permitted period (349 days) had also been providing / notifying Power Purchaser / System Operator with its Declared Available Capacity for generation in Simple Cycle mode under the PPA. However, no despatch instructions were given to operate in Simple Cycle mode by the Power Purchaser during the period starting from Simple Cycle COD till the lapse of 349-days. According to the Petitioner, it is imperative to highlight that the Project was planned to be developed in phases in line with the Previous 3 RLNG Projects so that it could also be available for generation in Simple Cycle mode to the Power Purchaser / System Operator. Accordingly, relevant provisions and requirements were included / embedded in the EPC Agreement and in the PPA as well.
- 12.3. According to the Petitioner, in order to make the plant available for generation in Simple Cycle mode as required under the PPA, the Petitioner had incurred various costs including certain fixed costs during the Simple Cycle period. However, due to no despatch instruction by the Power Purchaser, the Petitioner was unable to recover these costs as the same could only be recovered/billed on unit deliver basis during Simple Cycle period. Thus, the fixed cost incurred by the Petitioner has not been recovered. In fact, had the Petitioner received some despatch instruction/generation requirement during Simple Cycle period, even then the complete cost could not be recovered. It is important to mention that attaching recovery of the fixed costs through actual generation is against the spirit of two stage tariff methodology and should accordingly be rectified and approved in such manner that the fixed cost is recovered being a prudent cost incurred by the Petitioner to make its plant available for generation in Simple Cycle mode during the allowed period by the Authority. Moreover, it is submitted that the Project is executed under Cost Plus Tariff regime and all its costs are to be actualized. Hence, there is no margin available with the Petitioner under any of the tariff heads/component to recover these legitimate costs or get them adjusted.
- 12.4. According to the Petitioner, PTPL has prudently incurred these unavoidable fixed costs to comply with contractual requirements laid down under the PPA and other project agreements as approved by the Government agencies. Hence, it is requested that these costs be allowed as one time cost a part of Non-EPC cost component of the project cost on actual incurred basis or any other component to the tariff as deemed appropriate. The Petitioner submitted following breakup of the subject costs:

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Cost Head	USD million	PKR million	Average Exchange Rate
O&M Fee:			
Fixed O&M Fee	2.232	553.092	247.8
Fixed LTSA Fee	2.646	669.117	252.8
Cost of Working Capital:			
Working Capital Arrangement Fee	0.972	106.797	109.9
SBLC Commission & Arrangement Fee	3.241	356.200	109.9
Total¹	9.091	1,685.207	

12.5. CPPA-G in its comments did not support the subject cost. According to CPPA-G, the Company is claiming a cost which is not envisaged under the Tariff regime and such costs were not claimed by the other three GPPs as well. According to CPPA-G, the company had the opportunity to mitigate this cost by being more proactive in conducting combined cycle testing. CPPA-G further submitted that as per provisions of the PPA payment for Available Capacity becomes applicable from COD of the project.

12.6. The submissions of the Petitioner have been examined. With respect to the availability of the plant on simple cycle, it is noted that, in light of the severe power shortage at the time, the Authority had allowed simple cycle operation of all four RLNG projects including PTPL and a "take-and-pay" tariff structure was provided to recover of fixed O&M, variable O&M and fuel costs. The other three RLNG plants timely available their plants and provided generation on simple cycle as per merit order and accordingly recovered their fixed costs under the same tariff structure. In contrast, PTPL faced construction delays and could not make available its plant when there was the need existed. By the time PTPL was available, circumstances changed and NPCC did not issue dispatch instructions.

12.7. Given the above, the Authority does not agree with the request of the Petitioner. The non-recovery of cost rests with the plant. If the construction had been completed within the stipulated timeline, PTPL would likely have been dispatched during the period of shortage and recovered its costs—consistent with the treatment afforded to the other three RLNG projects under the same tariff structure. Further that the Availability based Fixed Tariff is applicable after COD. If the plant had been able to meet the timelines and become operational within the stipulated time period,

¹ The cost claimed is net off / excluding 61 days conversion period cost which is separately claimed under testing & commissioning head.

the issue would not have arisen as in the case of other 3 similar power plants where no such claims were filed for recovery of such costs. PTPL was supposed to monitor the demand-supply and reassess whether it would be prudent to make the plant available on simple cycle when there was obviously no such requirement existed. Accordingly, the Authority has decided to disallow the simple cycle availability period cost. The Petitioner may offset these costs against delay period LDs imposed on EPC contractor.

13. Whether the requested Administrative Expenses during construction of USD 15.564 million against USD 10.995 million is justified?

13.1. According to the Petitioner, in the original tariff petition, PTPL requested to allow USD 14.133 million on account of administrative costs along with the cost breakup and its rationale. The Authority determined an amount of USD 10.995 million as the administrative expense during construction period. Subsequently, the Petitioner through review petition, provided various rationale justifying its original claimed amount of USD 14.133 million. However, the Authority only allowed certain additional components such as administration cost for pre-NTP period of around 3-4 months on the basis of verifiable documentary evidence at the time of COD in addition to the caped amount of US\$ 10.995 million.

13.2. CPPA-G in its comments submitted that the matter has already been discussed by the Authority in the earlier determination and CPPA-G is of the view that only the cost established through verifiable documentary evidence as required by the Authority should be allowed.

13.3. The submissions of the Petitioner have been examined. It would be important to know about the administrative costs allowed to other 3 similar power plants in the reference determinations, their claim at COD and approved cost at COD. Following is the brief comparison:

Name	Determined Reference	Claimed at COD	Approved at COD
	US\$ Million		
QATPL	13.00	6.81	6.70
HBS	8.42	3.88	3.91
Balloki	8.90	3.95	3.97

13.4. The above reference approved cost was rationalized otherwise they claimed much higher. None of the above power plant was able to spend the budgeted/approved

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amount. The difference in the costs of HBS/Balloki with QATPL is associated with single management for the two projects as compared to single project in the latter case. Other than the delayed period costs, it is likely that PTPL will also remain within the approved administrative cost.

13.5. From Page 16-26 of the modification Petition, the Petitioner provided the details of costs disallowed or reduced by the Authority in the reference tariff determination along with the costs not claimed in the original petition. The summary of the same along with remarks is provided hereunder:

Administrative expenses during Construction	Petitioned	Determined	Remarks
	USD		
Computer Software/Hardware	142,180.00	-	Duplication. \$ 94,882 has already been allowed on account of software/hardware.
Group Life & Health Insurance (as per Petitioner it was actually insurance cost for office equipment and vehicles)	189,573.00	-	Duplication. Insurance during construction of \$ 5.305 Million has already been allowed.
Security & Surveillance	92,417.00	-	Duplication. Security & Surveillance cost of \$ 7.986 million has already allowed.
Miscellaneous Expenses (website development, web hosting, consultancy for taxes, WPPF/gratuity/chamber of commerce registration & membership fee, fee paid to the Authority for petitions/reviews and potential litigation regarding tax matters.	283,507.00	-	Has been considered in the instant petition under the overall caped amount.
Printing & Stationery Costs	227,488	65,719	Rationalized as was done in the similar cases
Training & Fees	428,319	200,000	
Vehicles Running & Maintenance	353,474	153,172	
Travelling, Boarding & Lodging	274,457	199,049	

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Automobiles & Motorcycles	430,976	186,756	The requested cost was allocated on the basis of useful life of 5 years without considering salvage value.
Costs not Claimed			
Impact of Inflation on Admin expenses	0.95		Pertains to the delayed period
Subsequent increase in Regulatory fee PPIB and SECP & Exchange rate variation	-	-	
Impact of Exchange rate variations on procurement & implementation of ERP Software and software licenses (anti-virus, firewall etc.)	-	-	Duplication. Discussed separately under succeeding Paragraph(s).
Additional Pre-NTP Cost	-	-	Has been considered in the instant petition under the overall caped amount.
Additional costs incurred due to COVID-19	-	-	

13.6. In addition to the above items, the Petitioner in respect of ERP submitted that PTPL claimed PKR 29.7 million (equivalent to USD 281,517 converted at an exchange rate of PKR/USD 105.5). The Petitioner while claiming the cost erroneously only assumed the cost of License (based on annual subscription) without considering cost for cloud-based services and also did not account for the cost for implementation and post implementation support services. Alternatively, had the Petitioner opted for an on-premises ERP solution, the cost would have been much higher as instead of cloud-based services fee it could need to incur significant amount of capex (hardware, backup system, firewalls, and setting up of server rooms etc.). According to the the Petitioner, a competitive bidding process was conducted under PPRA and received the following bid offered by renowned firms A.F.Ferguson & Co. Following is the component-wise breakup of the financially lowest bid received for the implementation of ERP system. It is also relevant to mention that the fee quoted is significantly lower than the prices / fee of annual cloud-based subscription mentioned at the Oracle's website:

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Sr. No.	Procurement and Implementation of Cloud-based ERP and Related Services	Revised Cost	Exchange Rate	Revised Cost
		PKR		USD
1	Annual Cloud Subscription Fee (for 03 Years)	139,958,505	109.9	1,273,507.78
2	Implementation Price of ERP Solution	58,608,095	109.9	533,285.67
3	Two Year Post Implementation Support Price	32,480,000	109.9	295,541.40
4	Migration of detailed historical transactional data - Optional at the discretion of Procuring Agency	8,120,000	109.9	73,885.35
	Total	239,166,600		2,176,220.20

13.7. According to the Petitioner, the above said cost has to be incurred in local currency (Pakistani Rupees), however for tariff purposes it is converted into USD using conversion rate mentioned in Reference Tariff Determination PKR 109.9/USD. If the same is converted into the current applicable exchange rate the amount works out to be USD 854,166/-. The Petitioner requested to allow the additional costs of USD 1,894,704 (USD 2,176,220 - USD 281,5170 already allowed) and other reliefs as claimed in the preceding paras which was inadvertently missed in the Reference Tariff Petition / Review Petition, which in any case are subject to actualization at the time of COD. The Petitioner further submitted that the Project is executed under Cost Plus Tariff regime and all its costs are to be actualized, hence, there is no margin available with the Petitioner under any of the tariff heads/component to recover these legitimate costs or get them adjusted.

13.8. Keeping in view the costs allowed to other similar power plants, the Authority has decided to maintain its earlier decision in the matter with the following provisions:

- The miscellaneous expenses and costs associated with Covid-19 falling within the approved construction period may be claimed at COD within the overall approved cap amount of US\$ 10.995 million on the basis of verifiable documentary evidence for actual spending.
- In case any pre NTP administrative cost has been reimbursed to QATPL and the same has been adjusted in QATPL's tariff then the Petitioner may claim that cost within the overall approved cap amount of US\$ 10.995 million on the basis of verifiable documentary evidence.

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- c) The requested additional cost pertaining to ERP may be claimed at COD within the overall approved cap amount of US\$ 10.995 million on the basis of verifiable documentary evidence for actual spending.

14. Whether the requested insurance cost of USD 5.960 million against USD 5.257 million is justified?

14.1. According to the Petitioner, in its earlier tariff determination, insurance cost was allowed as 1% of EPC cost i.e. USD 5.257 million which is insufficient as it does not include HSD inventory, LTSA initial spares, O&M spares, and cost incurred on customs duties for the import of plant and machinery, etc. for which mandatory insurance cover is also required. According to the Petitioner, it is also pertinent to mention that the current country risk profile has gone up due to natural calamities, flood, political violence, terrorism / security risk and delay in insurance premium payments (forex restrictions or delays owing to depleted foreign reserves). The recent insurance industry's NAT-CAT exposure profile also evidences the same and raised concern and classified the region as high-risk area due to the flooding last year. Moreover, these highest efficient H-class turbines are relatively a new technology which has yet to achieve major overhauling, hence, these are perceived higher risk technology by the insurance providers.

14.2. The Petitioner further submitted that the insurance industry benchmarks the "sum insured value" computed -based on "replacement cost", whereas, the Authority has allowed the insurance cost as a benchmark of 1% of the EPC cost which is historical / past cost. Hence, it does not take into account the inflation impact, change in regulatory cost customs duties (concessions not available under Implementation Agreement for imports after COD), and other factors adversely affecting the premium. Further, as required under the PPA, the Petitioner is required to obtain indemnity coverage of at least 18-months including insurance coverage for "business interruption" which takes into account indexation of inflation, KIBOR and other factors that change / increase on a year-to-year basis hence increase the sum insured value each year whereas the NEPRA's EPC cost benchmark of 1% remains the same. Resultantly, a perpetual delta is created between the actual cost incurred versus cost allowed.

14.3. According to the Petitioner, it is also relevant to point that as a standard insurance practice as well requirement under the financing documents, the Petitioner is required to engage international evaluator to determine replacement value of sum insured for the placement of insurance which is also beneficial / in the interest of the Petitioner being the public sector entity as well the Power Purchaser and Financier

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as in case of insurance claim the maximum amount would be recovered instead of recovery based on the historical EPC price. In the absence of valuation, the international reinsurers generally include average clause in the policy wording to secure under valuation of sum insured. Accordingly, PTPL engaged an international valuator firm (local representative) to perform the valuation and the draft results indicate the replacement value worked out of around USD 1 billion as compared to the EPC cost of USD 520 million. It is relevant to point out that the EPC price secured through the international competitive bidding process by the Petitioner is still the lowest ever EPC price in the Country and offered very competitive price amongst the prices being offered in the region. Further, the Petitioner is placed at disadvantage by the Authority while linking the insurance cost with EPC price as Petitioner had achieved the lowest ever EPC price as compared to other similar power projects including the Previous 3 RLNG project. All those similar projects who had achieved higher EPC prices are also getting 1% of EPC price which is more than what is being allowed to the Petitioner despite it having achieved the lowest EPC price.

- 14.4. According to the Petitioner, PTPL being a government owned entity is required under the Insurance Ordinance 2000 to obtain the insurance cover through state owned entities (i.e. NICL and PRCL) and accordingly is bound by the rates obtained and passed on to the Petitioner, which includes certain brokerage fee and commission as well (at a rate comparatively higher than the market rates). In view of the foregoing, the Petitioner requested to allow insurance cost capped at 1% of the Capital Cost (including EPC cost, items not covered under EPC, LTSA Initial Spares, Custom Duties and HSD Inventory) i.e. USD 5.96 million instead of existing US\$ 5.257 million as 1% of the EPC cost or alternatively, allow insurance cost capped at 0.75% of the Replacement value determined by the Independent Valuer which will work out to be US\$ 7.5 million. The Petitioner also submitted that the cost incurred shall be subject to actualization.
- 14.5. In addition to the above submissions, the Petitioner also requested to allow actual exchange rate of payment date instead of fixing the exchange rate prevailing on the 1st day of the insurance coverage period.
- 14.6. CPPA-G in its comments submitted that it understands that the Authority has maintained a cap of 1% of the EPC cost in similar RLNG projects and for the Coal Projects the Authority has allowed 1% of the 70% of the Capital Cost. The Company's request for 1% of the Capital Cost seems unreasonable and against the precedent set by the Authority. The Company should negotiate and manage its cost

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within the parameters defined by the Authority in the Reference Determination as per industry wide practice.

14.7. The submissions of the Petitioner have been reviewed. The issue raised by the Petitioner is common and prevalent in all 4 similar RLNG based power projects primarily due to the requirement by law to seek insurance from National Insurance Company Limited (NICL) being public sector plant(s). Except for these 4 power projects, this issue has never been raised by other IPPs and in all other cases, the allowed insurance is within 1% of the EPC cost even in those cases where the benchmark is 1.35% of the EPC cost. Exception, if any, will be rare.

14.8. The subject issue has been adequately addressed in the recent renegotiation/reduction of tariff with these plants. Under the renegotiation/reduction of tariff, the mechanism of 1% of the EPC cost has been replaced with 0.8% of the sum insured provided that the company shall ensure the participation of power purchaser being observer in the procurement process of insurance. The decision in respect of two similar power plants have been issued. PTPL insurance matter shall also be dealt in the like manner under the joint application as and when filed by the parties to the PPA.

15. Whether the requested Testing and Commissioning Cost of USD 18.712 million against USD 10.327 million is justified?

15.1. The Petitioner requested testing and commissioning cost of USD 18.712 million against already allowed cost of USD 10.327 million on account of following heads:

- i. Cost of working capital on test energy invoice.
- ii. Output degradation effect on variable O&M component. (actually misplaced and no connection with testing & commissioning also admitted by the representative of PTPL)
- iii. Correction of Conversion Period Cost for 61-days instead of 35-days.
- iv. Cost of independent engineer services.
- v. HSD testing & commissioning cost.
- vi. LTSA Variable Cost / Cost of Gas Turbine Operational Hours.

15.2. The comparison of approved and requested testing and commissioning cost is provided hereunder:

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Description	Approved Cost USD Million	Revised Cost USD Million
Fuel during testing:		
RLNG	9.617	9.617
HSD (in line with previous 3 RLNG projects)	-	4.950
O&M cost during the conversion period:		
LTSA Fixed Fee 61 days conversion for SC to CC against 35 days	0.311	0.610
O&M Fixed Fee for 61 days conversion for SC to CC against 35 days	0.398	0.492
Cost of Working Capital	-	1.394
LTSA Variable Cost during testing	-	1.448
Independent Engineer Cost	-	0.201
Total	10.329	18.712

15.3. PTPL requested modification of certain heads (**LTSA, conversion period cost**) and also requested new heads as **Independent Engineer costs, HSD costs and working capital** etc.

15.4. Regarding cost of HSD testing, PTPL submitted that under the PPA, the plant has to operate on HSD as a backup fuel as and when required by the System Operator/Power Purchaser. Accordingly, the Petitioner is required to conduct necessary testing and commissioning as well as establish performance and efficiency parameters on HSD in terms of PPA and EPC Agreement. The Petitioner has incurred cost related to testing and commissioning on HSD. The said cost is also allowed to the other RLNG Power Plants by the Authority. The said cost was inadvertently not claimed earlier, however, the same is incurred to fulfill the requirement under the PPA to test and commission the plant on HSD i.e. backup fuel as well. During testing and commissioning phase, the recovery against the generation is based on the reference tariff determined by the Authority (which is based on 55.76% efficiency and base load). However, the actual fuel consumption varies as power plant is commissioned at different loads as per OEM commissioning criteria, grid code requirements, NPCC system requirements / and constraints hence the corresponding cost is higher than the expected recoveries from the Power Purchaser as in the case of RLNG also. Accordingly, the said costs be allowed subject to verification at the time of COD. In view of the foregoing, the

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Petitioner requested the Authority to allow HSD cost of USD 4.95 million (Rs. 544 million) on account of fuel consumed during HSD testing.

- 15.5. Regarding conversion period costs, PTPL requested to revise conversion period cost to USD 1.102 million (Rs. 315.576 million) for 61-days instead USD 0.71 million for 35-days. PTPL submitted that under the executed EPC Agreement, the conversion period allowance for converting power plant from Simple Cycle to Combined Cycle is of 56 days. However, the Authority has allowed a conversion period of 35 days only which otherwise has no basis in any of the project documents. It seems that the 35 days conversion period is derived from Bhikki's EPC Agreement. Further, the PPA also allowed 61 days conversion period from Simple Cycle to Combined Cycle. Accordingly, the Petitioner has incurred fixed fee under LTSA and O&M Agreement during prescribed conversion period under PPA and if the same is not modified, the Petitioner will not be able to recover the prudently incurred costs.
- 15.6. Regarding cost of working capital, PTPL submitted that recovery of cost of working capital under simple and combined cycle operations is allowed but during testing & commissioning no mechanism is available for such recovery and hence requested to allow USD 1.394 million in testing & commissioning.
- 15.7. Regarding LTSA variable cost, the Petitioner submitted that it has entered into LTSA for scheduled and unscheduled maintenance of gas turbines and its related auxiliaries. Under the terms of LTSA and as well as in line with industry practices, the major maintenance of gas turbine(s) is dependent upon its operational hours (i.e. Equivalent Base Hours in the case of Siemens). It is important to highlight that the EBH are incurred during the commissioning phase of the project, the cost of which is also borne by the Petitioner under LTSA. However, the said cost is not recoverable in any of the tariff components. Accordingly, the Petitioner requested to allow LTSA variable cost of US\$ 1.448 million (Rs. 391.432 million).
- 15.8. Regarding cost of Independent Engineer, the Petitioner submitted that under the PPA, an Engineer is mandatorily required to be hired who would act impartially and independently to the functions mentioned under the PPA including but not limited to witnessing of pre and post synchronization commissioning tests. Accordingly, the Petitioner was required to hire the services of said engineer with the consent of the Power Purchaser in terms of PPA. The Petitioner, after conducting procurement process under the PPRA regime (public procurement), hired services of qualified independent engineer i.e. OMS (Private) Limited. The said cost is inevitable and prudently incurred in compliance with PPA requirement after conducting competitive bidding process. However, the said cost was inadvertently

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not included in Tariff Petition submitted earlier. In view of the foregoing, the Petitioner requested the Authority to allow cost of USD 201,000/- for the Engineering Services Agreement as required under PPA.

15.9. The Petitioner further submitted that the Project is executed under Cost Plus Tariff regime and all its costs are to be actualized. Hence, there is no margin available with the Petitioner under any of the tariff heads/component to recover these legitimate costs or get them adjusted. PTPL requested to allow the said cost subject to actualization of the same upon submission of verifiable documentary evidence at the time of tariff true-up.

15.10. CPPA-G did not support any of the requested additional costs under the head of testing and commissioning.

15.11. The submissions of the Petitioner and comments of CPPA-G have been examined. It has been noted that the costs requested by PTPL as above are significantly on the higher side. Regarding prudence and rationale of the Testing and Commissioning costs, a comparison is provided hereunder with costs allowed to other similar plants:

Balloki	HBS	QATPL
US\$ 10.956 Million	US\$ 11.04 Million	US\$ 10.87 Million

15.12. Considering the cost allowed to other similar power plants, the Authority has decided to allow PTPL to claim cost of HSD testing in line with other GPPs along with Independent Engineer cost & LTSA variable cost but within already allowed maximum cap of Testing and Commissioning Cost. Cost of working capital in the testing and commissioning phase has never been allowed to any other power plant, therefore, the same has not been considered. The conversion period cost primarily pertains to delayed period, therefore, the same has also not been considered.

16. Whether the requested electricity connection cost of USD 0.091 million is justified?

16.1. According to the Petitioner, the housing colony is required to be constructed by the EPC Contractor in terms of the EPC Agreement, whereas, the electricity connection for the housing colony is required to be procured/provided by the Petitioner. However, the Petitioner at the time of the Reference Tariff Petition inadvertently did not claim the electricity connection cost for its housing colony. According to the

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Petitioner, the housing facility is under construction and the Petitioner is required to obtain an electricity connection from the relevant distribution company i.e. FESCO. Accordingly, the FESCO was approached for a new connection / transfer of existing connection procured by the EPC contractor for temporary housing facility during construction phase. The EPC contractor also incurred significant cost on electricity infrastructure. The Petitioner after obtaining consent from its EPC contractor requested FESCO to transfer the existing connection which is estimated to cost approximately PKR 10 million (equivalent to USD 0.091 million converted at an exchange rate of PKR109.9/USD).

- 16.2. The Petitioner further submitted that the Project is executed under Cost-Plus Tariff regime and all its costs are to be actualized. Hence, there is no margin available with the Petitioner under any of the tariff heads/component to recover these legitimate costs or get them adjusted. Therefore, the Authority is requested to allow the electricity connection cost of PKR 10 million (USD 0.091 million) subject to actualization at the time of tariff true-up.
- 16.3. CPPA-G did not specifically commented on this cost and instead grouped this cost with some other requested costs and submitted that the Authority may review the costs based on verifiable documentary evidence and earlier precedence in the matter.
- 16.4. The submissions of the Petitioner have been evaluated. This is a miscellaneous nature cost primarily administrative cost, for which a maximum capped amount of US\$ 10.995 million have been provided, therefore, the Authority has decided to disallow the subject cost as a separate head and instead decided that the Petitioner may claim the same as part of administrative cost under the approved cap in the COD stage tariff adjustment.
- 17. Whether the requested Security Surveillance cost of USD 9.446 million against USD 7.986 million is justified?**

- 17.1. According to the Petitioner, the EPC and O& M Contractor are Chinese Firms and hence Chinese Nationals and other foreigners are stationed and working at the plant site. These foreigners have to commute to and from the plant on regular basis. Government of the Punjab (GoPb) has deployed a force, Special Protection Unit (SPU) to provide security to foreigners during their inter and intra city movement. District intelligence Committee (DIC), having its members from security and intelligence agencies, district administration and district police, continuously monitor the security and safety of the foreigners. DIC, regularly issue directions /

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advises for various steps/ activity to ensure the security of the foreigners. The DIC, vide its letter dated 12-05-2023, required the Petitioner to provide bullet proof vehicles for movement of Chinese, pursuant to directions of the Government of Pakistan (GoP) and prevailing security situation in the country. Accordingly, a case was submitted to Ministry of Interior, GoP through Energy Department, GoPb, for issuance of NOC in favor of the Petitioner to procure the requisite vehicle.

17.2. According to the Petitioner, meanwhile, a very sad incident of terrorism i.e. suicide attack on convoy of Chinese nationals happened at district Bisham in which 05 chines were killed. Subsequent to it, all the quarters concerned including Ministry of Interior, GoP and Home Department, GoPb required the Petitioner that movement of Chinese to and from the plant be made through a bullet and bomb proof vehicle only. The relevant communications from Ministry of Interior, GoP and Home Department, GoPb are placed respectively. Consequently, quotation for the purchase of vehicle and its retrofitting (from the company / firm enlisted with Ministry of Interior, GoP) have been obtained which are placed for perusal of the Authority. The estimated cost of the vehicle and its retrofitting is PKR 160 million approximately. It is Pertinent to mention that as stop gap measure, the Petitioner has arranged bullet and bomb proof vehicle for the movement of Chinese on rental basis and has been incurring rental cost. Arrangement of requisite vehicle on rental basis is very challenging due to limited availability, hence procurement of Bullet / Bomb Proof vehicle as a permanent solution on long term basis is inevitable which is also in line with the instruction of Government Authorities.

17.3. According to the Petitioner, in view of the foregoing, the Authority is requested to allow the cost for Bullet Proof & Bomb Proof Vehicle of PKR 160 million (USD 1.46 million converted at an exchange rate of PKR/USD 109.9) as part of one time Security and Surveillance cost included in the Capex, subject to actualization at the time of tariff true-up.

17.4. CPPA-G did not specifically commented on this cost and instead grouped this cost with some other requested costs and submitted that the Authority may review the costs based on verifiable documentary evidence and earlier precedence in the matter.

17.5. The submissions of the Petitioner have been evaluated. The Petitioner was allowed security and surveillance cost of approximately US\$ 8 million. The Petitioner did not disclose how much cost was incurred under this head up till COD and instead requested additional cost of Rs. 160 million for bullet and bombproof vehicles. It

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would be important to note that this cost is being requested after a letter dated 12-5-2023 from GoPb which is quite close to the date of actual COD of the plant i.e. 23rd June 2023 and that too is delayed. Had it been on time, the plant would have been operational years earlier. The requested additional cost actually belongs to the operational period and should have been claimed under the O&M cost. Therefore, keeping in view the security situation and directions of the federal and provincial government, the Authority has decided that actual lease rental/depreciation cost of bullet and bombproof vehicle(s), if any, on the basis of verifiable documentary evidence shall be included as company's part of O&M at the time of COD instead of making it part of project cost.

18. Whether request to allow partial load impact on the variable O&M component is justified?

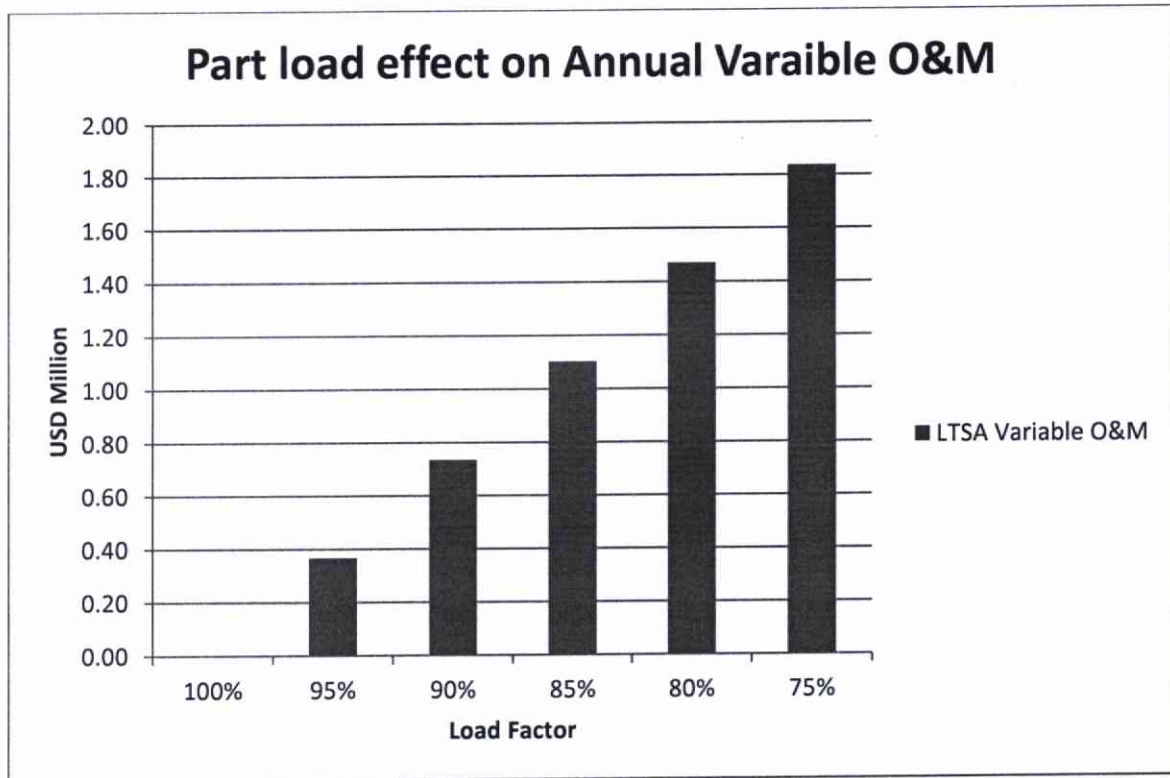
18.1. According to the Petitioner, as per the Tariff Determination, part load correction factor on Variable O&M Component is not allowed by Authority whereas O&M cost is subject to actualization based on the signed agreements. The Petitioner has entered into LTSA with GT OEM i.e. Siemens wherein the variable fee to the LTSA Contractor is based on the Equivalent Base Hours (EBH) of the Gas Turbines and the recovery of the same is subject to actual power generation (kWh) from the power plant as per Tariff Determination. In case, the power plant is despatched on the part load operation during operational phase by the System Operator, the Petitioner will incur irrecoverable losses under the LTSA fee payable to Siemens in lieu of EBH as the EBH of Gas Turbine(s) remains same (i.e. 1 hour in case of gas and 1.5 hour in case of HSD) even when Gas Turbines are operated on the partial load. Therefore, the Petitioner requests the Authority to consider the partial load effect to be applied on the Variable O&M Component. The chart showing the financial impact due to operation on Partial load while comparing LTSA variable fee against the expected recovery from CPPAG for the generation to be billed on basis of kWh as per the base data is given below.

18.2. According to the Petitioner, PTPL had previously requested the Authority to allow partial load impact on the variable O&M component under the Tariff Determination. The Authority in its determination of December 26, 2017 determined that it understands the said cost but the same is manageable. However, the Petitioner analyzed the same and is of the view that the said irrecoverable cost cannot be managed for the tariff control period as being the significant cost. For

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instance, if the Petitioner's power plant is operated at the average of 75% over the year, the said cost impact would be to the tune of around USD 1.8 million per annum. The annual impact at different power plant loads (from 75% to 100%) is shown in the chart below:



18.3. According to the Petitioner, it is also to be noted that agreements and all other related arrangements are kept based on the base load parameters in line with previous plant. PPA / regime and other costs needs to be covered through different adjustments in the tariff determination by the Authority. The said phenomenon appeared due to actualization of O&M cost and the same is requested to be provided to secure Petitioner from irrecoverable costs. In this regard, the Petitioner proposes a fair mechanism which would not adversely impact the Petitioner and the Power Purchaser. It is proposed that partial load factor be applied and given to variable O&M component only when the power plant is operated at any partial load by the System Operator / Power Purchaser. In case the power plant is not operated at partial load, the said partial load will not be applicable to the Variable O&M Component. The Petitioner has computed the partial load factor (KP) at different power plant loads in the table below which would be applied only in case of any partial load operations. The costs and the receivable shown in the table below are based on the base data under the Tariff Determination.

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Load Factor	Output (MWh)	LTSA Variable O&M Component under Tariff	Variable fee payable under LTSA Siemens	Kp Factor
100%	1,242.7	912.00	912	1.000
95%	1,180.6	866.40	912	1.053
90%	1,118.4	820.80	912	1.111
85%	1,056.3	775.20	912	1.176
80%	994.2	729.60	912	1.250
75%	932.0	684.00	912	1.333
70%	869.9	638.40	912	1.429
65%	807.8	592.80	912	1.538
60%	745.6	547.20	912	1.667
55%	683.5	501.60	912	1.818
50%	621.4	456.00	912	2.000
45%	559.2	410.40	912	2.222
40%	497.1	364.80	912	2.500

- 18.4. The Petitioner requested the Authority to consider and allow the applicability of partial load impact on the variable O&M component considering the payments to be made by the Petitioner to LTSA Service Provider. The Petitioner also requested Output degradation effect on variable O&M component under testing & commissioning. The Petitioner vide its letter dated June 5, 2025 requested to consider it under item 2(j) i.e. other costs.
- 18.5. According to the CPPA-G, the Authority has not awarded degradation on Variable O&M in the past to any GPPs. Further in line with the PPAs of other GPPs, the Company is already adequately compensated for degradation through load correction factor, heat rate degradation factor and output degradation factor in the PPA. Since this cost is already being managed by GPPs, the Company should strive to manage the same rather than passing it to the consumer.
- 18.6. The submissions of the Petitioner and comments of CPPA-G were examined. The claim of the petitioner on subject cost head is regarding mechanism and recovery of variable O&M due to part load operations which has never been approved in other plants. Standard compensation factors such as load correction factor, heat rate degradation & output degradation are also applicable in the case of PTPL.

- 18.7. As mentioned by CPPA-G, all GPPs are compensated for part load and degradation to the extent of fuel which is a substantial cost matter. It has been noted that operational GPPs are making substantial savings in fuel on account of part load and degradation factors. Although, they are incurring some additional cost in the O&M but they are overwhelmingly compensated by the savings in fuel. Therefore, in line with other power plants, the Authority has decided to disallow degradation and part load on Variable O&M.
19. **Whether the requested O&M mobilization & Training cost of USD 7.870 million against USD 5.257 million is justified?**
- 19.1. According to the Petitioner, at the time of submission of Reference Tariff Petition, the Petitioner requested USD 6 million for mobilization and training cost for O&M Contractor based on the benchmarks given at that time to other three GPPs / Previous 3 RLNG Projects as specific cost to O&M Contractor as no O&M Agreement was available at that time. The Authority had approved USD 5.257 as mobilization and training cost being 1% cost of EPC Agreement Price in its determination. It is pertinent to note that approved mobilization and training cost was not sufficient due to linkage of the same with EPC Price where Petitioner had fetched the lowest ever EPC Price compared to all other comparable power projects. The O&M Agreement and EPC Agreement price are not directly relatable as the nature of works under O&M Agreement generally remains unaffected from EPC Agreement price. Subsequently, Petitioner conducted an international bidding process for the hiring of O&M contractor and again fetched one of the lowest O&M prices as compared to the other similar projects and NEPRA allowed limits. However, under the successful bid / O&M agreement, Harbin Electric International (HEI) (the successful bidder) quoted USD 0.7 million per month and accordingly incurred the total cost of mobilization fee of USD 7.87 million. The Petitioner requested the Authority to allow mobilization and training cost to Petitioner based on the actual mobilization cost incurred as per the terms of the signed O&M Agreement.
- 19.2. CPPA-G in its comments on the requested mobilization cost submitted that the Authority has established a maximum cap of 1% of EPC cost subject to downward adjustment on the basis of actual documentary evidence at the time of COD. Further, in QATPL the Authority had disallowed costs exceeding the maximum

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allowable limit. CPPA-G is of the view that the criteria set by the Authority should be maintained similar to other projects.

- 19.3. The submissions of the Petitioner and comments of CPPA-G have been examined. Schedule R of the signed O&M agreement deals with the agreement price, the breakup of which is provided hereunder:

Fees	Unit	Amounts
Mobilization Period Initial Fee (lump sum)	USD	1,051,400
Mobilization Period Fixed Monthly Fee	USD/month	700,000
Recommended Spare Parts Fee (lump sum)	USD	7,500,000
Combined Cycle Fixed Monthly Fee-Foreign	USD/month	588,000
Combined Cycle Fixed Monthly Fee-Local	PKR/month	11,400,000
Combined Cycle Variable Fee	USD/kwh	0.000398

- 19.4. It is further provided that all the above prices are inclusive of all federal, provincial or local taxes, duties, cess, fee etc including but not limited to federal/provincial sales tax. The first two items of the above price schedule pertains to the mobilization period cost. According to the Petitioner, US\$ 7,864,733/- (Rs. 1,764,835,590) inclusive of Punjab Sales Tax @ 16% has been paid on account of mobilization period cost.

- 19.5. Mobilization period has been defined in Section 2.2.1 of the O&M Agreement which says as follows:

“The mobilization period shall commence on the date the Company serves a notice on the O&M Contractor in respect of the commencement of the Mobilization Period (the **Mobilization Notice to Proceed**), which notice shall not be issued later than two (2) months prior to the Scheduled Commercial Operation Date. The Mobilization Period shall end on the Commercial Operation Date.”

- 19.6. The mobilization notice to proceed was issued on 2nd August 2022 for commencement of mobilization period under the O&M Agreement from September 01, 2022. In accordance with Section 2.2.1 and mobilization NTP, the mobilization period starts from 1st September 2022 and ends on 22nd June 2023 as the COD was achieved on 23rd June 2023. The total mobilization period lasts for approximately 10 months which seems quite high as compared to approximately 2-3 months in case

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of other 3 similar power plants. The Petitioner was asked vide email dated 12th March 2025 to provide reasons/justification for such an extended period as it resulted in extra cost @ US\$ 700,000/month. The Petitioner vide its email dated 13th March 2025 provided following reply in the matter:

"The Power Plant is latest & state of the art technology supplied by Siemens (OEM), which is unique in the country compared to 3 GPPs having similar GE technology. The power plant knowledge sharing, training and resource pooling remains limited in the power sector of the Country. Additionally, EPC and O&M Contractors are different entities as compared to GPPs e.g. Bhikki – EPC and O&M contractor is HEI which also required time to smooth switch over / handing over of all systems, manuals etc.

It is also important to mention that the unique, latest and state-of-art technology require O&M operator to attend extensive training session arranged by EPC Contractor / OEMs during commissioning / mobilization and also participated during complex testing & commissioning phase to develop understanding of various operating system, software logics, programming sequence, OEM protocols and methodologies. In addition, the O&M Contractor was required to identify the critical spare part list within the allowed budgets under O&M Agreement. The said activity itself involved review of lots of design, manuals and other related documents which is extensive and time taking. Subsequently, the preparation for sourcing of spare parts was required to be performed.

In view of the above, more time was required by O&M Contractor to familiarize itself with operational and maintenance philosophy of the power plant."

- 19.7. In the instant case, the minimum mobilization period is 2 months as defined under Section 2.2.1 and reproduced above which negates the stance of the Petitioner in favour of substantially higher mobilization period. If 10 months mobilization period had been required, they would never had agreed two months.
- 19.8. In case of 2 similar NPPMCL plants, the mobilization period was 2 and 4 months for HBS and Balloki respectively. However the actual mobilization for Balloki was less than 2 months and the actual mobilization cost allowed at the time of COD tariff true ups was US\$ 3.06 million for HBS and US\$ 4.55 million for Balloki against originally approved cap amount of US\$ 6 million. In these two plants, mobilization period as per definition start with NTP and ends on the simple cycle start date GT1 which is different from PTPL and QATPL where the end date is commercial

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operation date. In case of QATPL O&M contractor was mobilized w.e.f. 16th October 2016 and mobilization cost of US\$ 3.081 million was paid till scheduled commercial operation date of 20th December 2017 with initial fee of US\$ 2 million and fixed monthly fee @ US\$ 500,000/month and the same was allowed. QATPL also paid fixed monthly fee of US\$ 2.5 million from 21st December 2017 to actual commercial operation date of 20th May 2018 which was not allowed and was considered as delayed period cost (recovered by QATPL through LDs on EPC contractor). The definition of scheduled commercial operation date is provided hereunder:

“The date reasonably estimated by the Company as the Commercial Operations Date based on the then-existing construction schedule, as notified to the Power Purchaser, as such date may be modified by the Company from time to time in the Construction Reports or in other written notices from the Company to the Power Purchaser.”

- 19.9. PTPL, was asked to provide the scheduled commercial operation date at the time of issuing mobilization notice to proceed which is still pending. A follow up email in the matter was also sent on 27th June 2025. PTPL vide its mail dated 27th June 2025 submitted that it is reiterated that Concession agreements were signed in 2020 and become effective on April 24, 2021 at Financial Close. As per the PPA, the Required Commercial Operations Date was twenty-six (26) months following the date on which Financial Closing occurs i.e. June 23, 2023. Accordingly, remobilization was started, and construction activities were resumed in phases. However, the contractor showed its inability to provide any firm project completion schedule, hence, the project completion timeline could not be finalized. The challenges such as long idling, additional testing by OEM due to preservation, retesting by NTDC, gas availability issues, frequent lockdowns and travel restriction for workforce caused by COVID etc. In view of the foregoing, the contractor provided only tentative timelines.
- 19.10. Keeping in view the above discussion, the Authority considers that the requested 10 months' mobilization cost is not justified. Accordingly, the Authority has decided to maintain its earlier decision in the matter. The already allowed maximum cap shall be subject to downward adjustment only based on provision of documentary evidence at the time of COD.
20. **Whether the request to allow Technical Modifications and Upgrade cost of 36 million for twelve years subject to actualization based on signed and executed agreement for Extra works at the time of one-time adjustment (true-up) pertaining to COD is justified?**

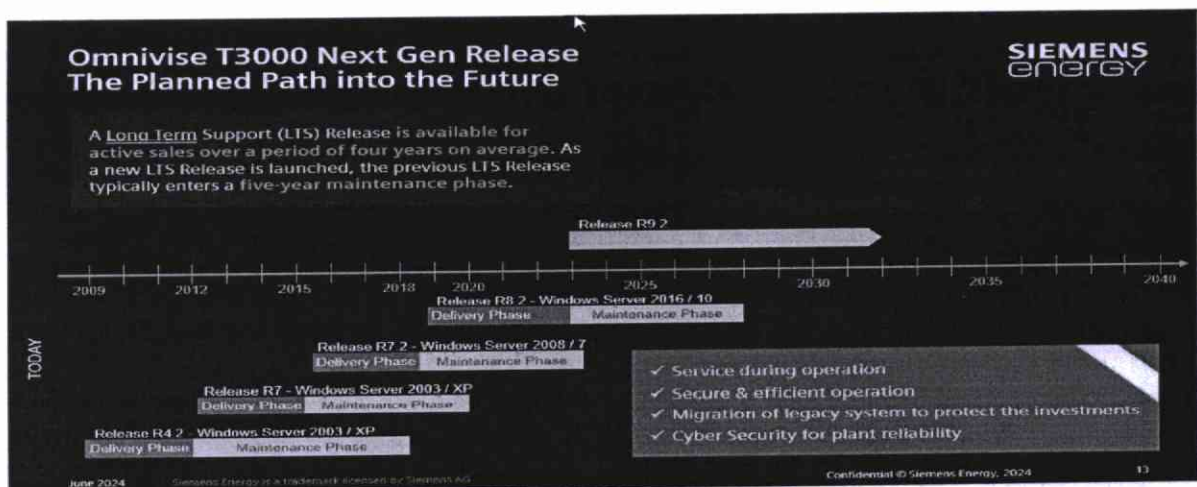
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20.1. According to the Petitioner, PTPL has executed LTSA with OEM i.e. Siemens for maintenance of gas turbines and associated equipment and O&M Agreement with Harbin Electric International (HEI) for operation and maintenance of the power plant for twelve years or one hundred thousand hours, whichever is later. The terms and conditions related to the obligations of each contractor under the respective agreement are clearly defined as per prudent industry practices. As per industry practices including the previous 3 RLNG projects, the mandatory modifications and upgrades remains the responsibility of Project Company. Such modifications and upgrades are frequently released by OEMs vide product bulletins or technical information letters. Accordingly, under the O&M Agreement and LTSA, the mandatory upgrades are the responsibility of the Petitioner. In case there is a requirement for any upgrades at the power plant, the respective contractor under LTSA or O&M Agreement will be given additional compensation to execute any such upgrade under Extra Works provision of the agreements.

20.2. According to the Petitioner, the mandatory upgrades relate to operation, maintenance and safety changes at the power plant. For instance, one such example is upgrade of Distributed Control System (DCS) of the power plant. The OEM release upgrades for DCS after every five to six years and the said upgrade is mandatory for safe and reliable operation of the power plant. Accordingly, it is anticipated that total of four to six upgrades of DCS will come during the tariff control period. At Petitioner's power plant, the DCS is from Siemens i.e. T3000 version 7.2. which needs to be upgraded with version 9.2 (the current version of T3000 DCS released from Siemens). The life cycle of Siemens DCS is around four to six years for each of the DCS version. It is estimated that each upgrade of DCS may cost around USD five (05) to six (06) million corresponding to USD One million per annum under the LTSA.



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- 20.3. According to the Petitioner, in addition to DCS, there are several other upgrades or modifications required at the power plant based on the OEM recommendations from time to time for safe and reliable operations. The said upgrades are related to major equipment of the power plant i.e. Gas Turbines, Steam Turbines, Generators, Transformers, HRSGs, Valves etc. It is also common practice that certain equipment / parts become obsolete and supersede by new design from the OEMs which needs replacement as the OEM stops to offer replacement parts or systems as whole. The said arrangement comes under the ambit of Extra Works under executed LTSA and O&M Agreement. The estimated cost for any such obsolescence or upgrade is approximately USD two (02) million per annum.
- 20.4. According to the Petitioner, it is to be noted that the Authority under the Tariff Determination has allowed Petitioner's O&M cost based on the signed agreements without any margin. It is requested that USD thirty-six (36) million be allowed to the Petitioner for upgrades & modifications for twelve years subject to actualization based on signed and executed agreement for Extra Works at the time of one-time adjustment (true-up) pertaining to COD. The Petitioner's overall cost of O&M Component will remain within the allowed limits from NEPRA in its Tariff Determination. The request is truly in the spirit of cost-plus tariff regime well as reasonable within the modalities allowed to the Petitioner under the Tariff Determination and Tariff rules.
- 20.5. CPPA-G did not specifically comment on this cost and instead grouped this cost with some other requested costs and submitted that the Authority may review the costs based on verifiable documentary evidence and earlier precedence in the matter.
- 20.6. The submissions of the Petitioner have been reviewed. Concisely, the Petitioner requested US\$ 1 million/annum on account of technical updates and US\$ 2 million/annum for obsolete parts replacement, totalling US\$ 36 million for 12 years of LTSA/O&M contracts. The upgradation matter/activity and its frequency is not very time specific as the current software, etc. may remain available for an increased period of time than the anticipated lifespan. Some critical spares may also be available with the plant. Therefore, the Authority has decided that the Petitioner shall submit need assessment and its cost along with comments of ISMO, as and when required, for consideration and prior approval of NEPRA.
21. **Whether the request to allow one-time cost for Audit & development of policies of USD 150,000/- and annual recurring cost of USD 200,000/- for Cyber Security insurance as part of O&M is justified?**

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- 21.1. According to the Petitioner, as per NEPRA guidelines, the Company is planning to engage an insurance advisor / consultant firm to perform cyber security audit and develop comprehensive insurance plan for the procurement of Cyber Security insurance. Therefore, the one-time audit and insurance policies development cost of approximately USD 150,000/- and annual recurring cost of USD 200,000/annum as Cyber security insurance premium is requested to be allowed as a part of O&M. The Petitioner overall cost of O&M Component will remain within the allowed limits from NEPRA in its Tariff Determination.
- 21.2. CPPA-G did not specifically commented on this cost and instead grouped this cost with some other requested costs and submitted that the Authority may review the costs based on verifiable documentary evidence and earlier precedence in the matter.
- 21.3. The submissions of the Petitioner and comments of CPPA-G were examined. Cyber security is an important issue and must be ensured. Like other insurance costs, the requested actual cyber security insurance cost, if any, is also an operational cost and should be part of insurance cost component of tariff. As has been mentioned under the insurance issue, the maximum cap has been revised to 80% of the sum insured provided that the company shall ensure the participations of power purchaser being observer in the entire procurement process of insurance. The Authority has decided that cyber security insurance shall be part of the insurance component provided it is covered under the relevant Schedule of the PPA. One time cyber security audit cost may also be claimed in the insurance cost with the consent of the power purchaser.
- 22. Whether the request to allow BOP Spares cost of USD 7.501 million against USD 1.710 million is justified?**
- 22.1. According to the Petitioner, in the original petition PTPL requested to allow USD 5.5 million on account of BOP Spares (based on its best estimate), to be procured in addition to the spares covered under the EPC Contract, to ensure that in case of a breakdown, there is a minimal lead time involved and parts are readily available for maintenance works. However, the Authority in line with other 3 RLNG projects allowed only USD 1.71 million for BOP spares subject to its verification at the time of COD on account of actual spending based on verifiable documentary evidence on the following grounds.
- 22.2. According to the Petitioner, spare parts for the plant are covered in two regimes i.e. LTSA (for the major equipment like GTs, GTG and ST) and O&M (for balance of

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plant). Petitioner has efficiently procured the contracts for LTSA and O&M with lowest per MW operational cost. The Petitioner claimed LTSA spare parts of USD 10.5 million whereas the Authority approved LTSA spares of USD 20.88 million for each plant (on the basis of LTSA agreements) subject to verification at the time of COD.

22.3. According to the Petitioner, against approved BOP spares cost of US\$ 1.71 million, the O&M contractor recommended procurement of certain necessary BOP spare parts list worth of USD 7.5 million to ensure smooth operation and maintenance. The Petitioner further submitted that the Authority allowed (revised cost) USD 7.5 million of BOP spares to each of the 3 RLNG plants (in modification determination). The Petitioner requested the Authority to allow the BOP spares as recommended by the O&M contractor and detailed in O&M agreement for an amount of USD 7.5 million in line with the previous 3 power plants. Moreover, the plant has relatively more capacity hence would require additional parts to ensure availability. The Petitioner further requested the Authority to compare combined cost of spares (LTSA+BOP) of the all the four similar plants i.e. US\$ 28.38 million to each of the three plants against requested cost of US\$ 18 million for PTPL. The Petitioner further reiterated that the said parts are critical to ensure the plant's reliability and availability, hence need to be procured. The request is truly in the spirit of cost-plus tariff regime and as well as reasonable within the modalities allowed to the Petitioner under the Tariff Determination and Tariff Rules.

22.4. CPPA-G in its comments on account of BOP spares submitted that the Authority may review the costs based on verifiable documentary evidence and earlier precedence in the matter.

22.5. Not Used

22.6. The submissions made by the Petitioner were examined. In the determination dated 26th December 2017, the Authority allowed BOP spares of US\$ 1.71 million against the requested cost of US\$ 5.5 million in line with the 3 similar power plants. However, later on in the modification petitions decisions of those plants, the Authority revised the cap for BOP spares as per the signed O&M Agreement subject to its adjustment as per actual paid amount at the time of COD. The BOP spares cap

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was revised to US\$ 7.5 million, US\$5.92 million and US\$ 7.5 million for Balloki, HBS and QATPL projects respectively. In line with those projects, the Authority has decided to revise the maximum cap to US\$ 6.47 million excluding provincial sales tax @ 16% (US\$ 7.5 million including PST) as per Schedule R of the signed O&M Agreement reproduced above under Para 19 in the instant case subject to its adjustment as per actual at the time of COD tariff true up. Sales tax is adjustable and non-adjustable sales tax may be claimed as pass through under the PPA.

23. Cost of Working Capital on Tax Amount.

23.1. PTPL vide its addendum 2 dated 6th February 2025 requested cost of working capital on actual number of days funds remained tied up from the date payment of taxes made to the authorities till the invoice to the Power Purchaser become due.

23.2. No such cost is provided to any other power plant, therefore, the Authority has decided to disallow the same in the instant case.

24. Summary of Revised Project cost & Tariff

24.1. The comparison of existing and revised approved costs is provided hereunder:

Description	Existing	Revised
	US\$ Mln	
Unchanged Project Cost	654.987	654.987
BOP Spares	1.710	6.470
Financing Fees & Charges	14.776	16.087
IDC	36.285	37.437
Total	707.758	714.982

24.2. The above approved changes in the project cost affected only two tariff components i.e. debt servicing and ROE. The comparison of both is provided hereunder:

Description	Existing	Revised
	Rs./kW/hr.	
Debt Servicing (1-10 yrs) – RLNG	0.8111	0.8194
Debt Servicing (1-10 yrs) – HSD	0.9318	0.9413
ROE (1-30 yrs) – RLNG	0.2562	0.2588
ROE (1-30 yrs) – HSD	0.2943	0.2973

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25. ORDER

- I. The Authority hereby modifies the generation tariff for Punjab Thermal Power (Private) Limited to the extent of followings:

TARIFF ON COMBINED CYCLE OPERATION

Tariff Components	1-10 Years		11-30 Years		Indexations/Adjustments
	RLNG	HSD	RLNG	HSD	
Capacity Charges (Rs./kW/hr):					
ROE	0.2588	0.2973	0.2588	0.2973	Rs./US\$
Debt Servicing	0.8194	0.9413	-	-	KIBOR

- Schedules of tariffs are attached at Annex-I and Annex-II.
- Schedules of debt servicing are attached as Annex-III and Annex-IV

II. Following cost items shall also be considered and actualized at the time of COD tariff adjustment:

- i) Adjustment as per actual with maximum of requested amount for miscellaneous expenses, covid 19 costs, additional ERP cost and electricity connection cost within the already approved maximum overall cap amount of US\$ 10.995 million on account of Administrative Expenses.
- ii) In case any pre NTP administrative cost has been reimbursed to QATPL and the same has been adjusted in QATPL's tariff then the Petitioner may claim that cost within the overall approved cap amount of US\$ 10.995 million on the basis of verifiable documentary evidence.
- iii) Cost of HSD testing in line with other GPPs along with Independent Engineer cost & LTSA variable cost but within already allowed maximum cap of Testing and Commissioning.
- iv) Adjustment as per actual with maximum of US\$ 6.47 million for BOP spares.

- v) Additional security cost (lease rental/depreciation) on account of bullet and bombproof vehicles shall be included as part of O&M at the time of COD tariff adjustment.
- vi) Adjustment as per actual of US\$ 16.087 million for Financing Fees & Charges subject to maximum of 3.0% of the debt amount.
- vii) The IDC shall be re-established at the time of COD on the basis of applicable KIBOR, actual premium, actual loan and actual loan drawdown.

III. Indexation for KIBOR 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 KIBOR according to the following formula;

ΔI	=	$P_{(REV)} * (KIBOR_{(REV)} - 6.14\%) / 2$
Where:		
ΔI	=	the variation in interest charges applicable corresponding to variation in 3 months KIBOR. ΔI can be positive or negative depending upon whether $KIBOR_{(REV)}$ is > or < 6.14%. The interest payment obligation will be enhanced or reduced to the extent of ΔI for each semi-annual period under adjustment applicable on semi-annual basis.
$P_{(REV)}$	=	The outstanding principal (as indicated in the attached debt service schedule to this order) on a semi-annual basis on the relevant period calculation date. Period 1 shall commence on the date on which the 1 st installment is due after availing the grace period.
$KIBOR_{(REV)}$	=	Average of the KIBOR prevailing on the last date of the preceding two quarters



VII. NOTIFICATION

- i. The above Order of the Authority is intimated to the Federal Government for notification in the Official Gazette in terms of Section 31(7) of the Regulations of Generation, Transmission and Distribution of Electric Power Act, 1997.

AUTHORITY

Engr. Rafique Ahmed Shaikh
Member

Amina Ahmed
Member

Engr. Maqsood Anwar Khan
Member

Waseem Mukhtar
Chairman



Punjab Thermal Power (Pvt) Limited
Reference Tariff Table RLNG

Year	Energy Purchase Price (Rs./kWh)			Capacity Purchase Price (PKR/kW/Hour)									Total Tariff	
	Fuel	Var. O&M	Total EPP	Fixed O&M local	Fixed O&M foreign	Cost of W/C	Insurance	ROE	Debt Repayment	Interest Charges	Total CPP	Capacity charge@ 92%	Rs. / kWh	Cents/kWh
1	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	0.3593	0.4601	1.3906	1.5116	7.4200	6.7516
2	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	0.3910	0.4284	1.3906	1.5116	7.4200	6.7516
3	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	0.4255	0.3939	1.3906	1.5116	7.4200	6.7516
4	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	0.4631	0.3564	1.3906	1.5116	7.4200	6.7516
5	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	0.5039	0.3155	1.3906	1.5116	7.4200	6.7516
6	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	0.5484	0.2710	1.3906	1.5116	7.4200	6.7516
7	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	0.5968	0.2226	1.3906	1.5116	7.4200	6.7516
8	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	0.6495	0.1699	1.3906	1.5116	7.4200	6.7516
9	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	0.7068	0.1126	1.3906	1.5116	7.4200	6.7516
10	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	0.7692	0.0502	1.3906	1.5116	7.4200	6.7516
11	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	-	-	0.5712	0.6209	6.5293	5.9412
12	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	-	-	0.5712	0.6209	6.5293	5.9412
13	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	-	-	0.5712	0.6209	6.5293	5.9412
14	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	-	-	0.5712	0.6209	6.5293	5.9412
15	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	-	-	0.5712	0.6209	6.5293	5.9412
16	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	-	-	0.5712	0.6209	6.5293	5.9412
17	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	-	-	0.5712	0.6209	6.5293	5.9412
18	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	-	-	0.5712	0.6209	6.5293	5.9412
19	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	-	-	0.5712	0.6209	6.5293	5.9412
20	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	-	-	0.5712	0.6209	6.5293	5.9412
21	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	-	-	0.5712	0.6209	6.5293	5.9412
22	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	-	-	0.5712	0.6209	6.5293	5.9412
23	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	-	-	0.5712	0.6209	6.5293	5.9412
24	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	-	-	0.5712	0.6209	6.5293	5.9412
25	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	-	-	0.5712	0.6209	6.5293	5.9412
26	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	-	-	0.5712	0.6209	6.5293	5.9412
27	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	-	-	0.5712	0.6209	6.5293	5.9412
28	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	-	-	0.5712	0.6209	6.5293	5.9412
29	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	-	-	0.5712	0.6209	6.5293	5.9412
30	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	-	-	0.5712	0.6209	6.5293	5.9412
Average														
1-10	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	0.5414	0.2781	1.3906	1.5116	7.4200	6.7516
11-30	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	0.0000	0.0000	0.5712	0.6209	6.5293	5.9412
1-30	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	0.1805	0.0927	0.8444	0.9178	6.8262	6.2113
Levelized														
1-30	5.6005	0.3079	5.9084	0.0631	0.1041	0.0922	0.0531	0.2588	0.3303	0.2038	1.1053	1.2014	7.1099	6.4694

7.1099 Rs./kWh

6.4694 US Cents/kWh

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Punjab Thermal Power (Pvt) Limited
Reference Tariff Table HSD

Year	Energy Purchase Price (Rs./kWh)			Capacity Purchase Price (PKR/kW/Hour)									Total Tariff	
	Fuel	Var. O&M	Total EPP	Fixed O&M local	Fixed O&M foreign	Cost of W/C	Insurance	ROE	Debt Repayment	Interest Charges	Total CPP	Capacity charge@ 92%	Rs. / kWh	Cents/kWh
1	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	0.4127	0.5286	1.5975	1.7364	12.9023	11.7400
2	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	0.4491	0.4921	1.5975	1.7364	12.9023	11.7400
3	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	0.4888	0.4525	1.5975	1.7364	12.9023	11.7400
4	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	0.5319	0.4094	1.5975	1.7364	12.9023	11.7400
5	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	0.5789	0.3624	1.5975	1.7364	12.9023	11.7400
6	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	0.6300	0.3113	1.5975	1.7364	12.9023	11.7400
7	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	0.6856	0.2557	1.5975	1.7364	12.9023	11.7400
8	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	0.7461	0.1952	1.5975	1.7364	12.9023	11.7400
9	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	0.8120	0.1293	1.5975	1.7364	12.9023	11.7400
10	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	0.8836	0.0577	1.5975	1.7364	12.9023	11.7400
11	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	-	-	0.6562	0.7132	11.8791	10.8090
12	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	-	-	0.6562	0.7132	11.8791	10.8090
13	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	-	-	0.6562	0.7132	11.8791	10.8090
14	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	-	-	0.6562	0.7132	11.8791	10.8090
15	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	-	-	0.6562	0.7132	11.8791	10.8090
16	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	-	-	0.6562	0.7132	11.8791	10.8090
17	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	-	-	0.6562	0.7132	11.8791	10.8090
18	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	-	-	0.6562	0.7132	11.8791	10.8090
19	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	-	-	0.6562	0.7132	11.8791	10.8090
20	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	-	-	0.6562	0.7132	11.8791	10.8090
21	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	-	-	0.6562	0.7132	11.8791	10.8090
22	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	-	-	0.6562	0.7132	11.8791	10.8090
23	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	-	-	0.6562	0.7132	11.8791	10.8090
24	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	-	-	0.6562	0.7132	11.8791	10.8090
25	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	-	-	0.6562	0.7132	11.8791	10.8090
26	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	-	-	0.6562	0.7132	11.8791	10.8090
27	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	-	-	0.6562	0.7132	11.8791	10.8090
28	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	-	-	0.6562	0.7132	11.8791	10.8090
29	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	-	-	0.6562	0.7132	11.8791	10.8090
30	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	-	-	0.6562	0.7132	11.8791	10.8090
Average														
1-10	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	0.6219	0.3194	1.5975	1.7364	12.9023	11.7400
11-30	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	0.0000	0.0000	0.6562	0.7132	11.8791	10.8090
1-30	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	0.2073	0.1065	0.9699	1.0543	12.2202	11.1193
Levelized														
1-30	10.7216	0.4443	11.1659	0.0724	0.1196	0.1059	0.0610	0.2973	0.3794	0.2341	1.2697	1.3801	12.5460	11.4158

Levelized Tariff =

12.5460 Rs./kWh

11.4158 US Cents/kWh

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Punjab Thermal Power (Pvt) Limited
Debt Service Schedule RLNG

Gross Capacity	1263.20	MWs	US\$/PKR Parity	109.90
Net Capacity	1242.70	MWs	Debt	536.24 US\$ Million
KIBOR	6.14%		Debt in Pak Rupees	58,932.35 Rs. Million
Spread over KIBOR	2.50%			
Total Interest Rate	8.64%			

Period	Principal Million Rs.	Principal Repayment Million Rs.	Interest Million Rs.	Balaance Million Rs.	Debt Service Million Rs.	Principal Repayment Rs./kW/h	Interest Rs./kW/h	Debt Servicing Rs./kW/h
1	58,932.35	1,914.23	2,545.88	57,018.13	4,460.11			
2	57,018.13	1,996.92	2,463.18	55,021.20	4,460.11	0.3593	0.4601	0.8194
1st Year		3,911.15	5,009.06		8,920.21			
3	55,021.20	2,083.19	2,376.92	52,938.02	4,460.11			
4	52,938.02	2,173.18	2,286.92	50,764.83	4,460.11	0.3910	0.4284	0.8194
2nd Year		4,256.37	4,663.84		8,920.21			
5	50,764.83	2,267.06	2,193.04	48,497.77	4,460.11			
6	48,497.77	2,365.00	2,095.10	46,132.77	4,460.11	0.4255	0.3939	0.8194
3rd Year		4,632.07	4,288.14		8,920.21			
7	46,132.77	2,467.17	1,992.94	43,665.60	4,460.11			
8	43,665.60	2,573.75	1,886.35	41,091.85	4,460.11	0.4631	0.3564	0.8194
4th Year		5,040.92	3,879.29		8,920.21			
9	41,091.85	2,684.94	1,775.17	38,406.91	4,460.11			
10	38,406.91	2,800.93	1,659.18	35,605.98	4,460.11	0.5039	0.3155	0.8194
5th Year		5,485.86	3,434.35		8,920.21			
11	35,605.98	2,921.93	1,538.18	32,684.06	4,460.11			
12	32,684.06	3,048.15	1,411.95	29,635.90	4,460.11	0.5484	0.2710	0.8194
6th Year		5,970.08	2,950.13		8,920.21			
13	29,635.90	3,179.83	1,280.27	26,456.07	4,460.11			
14	26,456.07	3,317.20	1,142.90	23,138.86	4,460.11	0.5968	0.2226	0.8194
7th Year		6,497.04	2,423.17		8,920.21			
15	23,138.86	3,460.51	999.60	19,678.36	4,460.11			
16	19,678.36	3,610.00	850.11	16,068.36	4,460.11	0.6495	0.1699	0.8194
8th Year		7,070.51	1,849.70		8,920.21			
17	16,068.36	3,765.95	694.15	12,302.41	4,460.11			
18	12,302.41	3,928.64	531.46	8,373.77	4,460.11	0.7068	0.1126	0.8194
9th Year		7,694.59	1,225.62		8,920.21			
19	8,373.77	4,098.36	361.75	4,275.41	4,460.11			
20	4,275.41	4,275.41	184.70	0.00	4,460.11	0.7692	0.0502	0.8194
10th Year		8,373.77	546.44		8,920.21			



Punjab Thermal Power (Pvt) Limited

Debt Service Schedule HSD

Gross Capacity	1105.00	MWs	US\$/PKR Parity	109.90
Net Capacity	1081.80	MWs	Debt	536.24 US\$ Million
KIBOR	6.14%		Debt in Pak Rupees	58932.35 Rs. Million
Spread over KIBOR	2.50%			
Total Interest Rate	8.64%			

Period	Principal Million Rs.	Principal Repayment Million Rs.	Interest Million Rs.	Balaance Million Rs.	Debt Service Million Rs.	Principal Repayment Rs./kW/h	Interest Rs./kW/h	Debt Servicing Rs./kW/h
1	58,932.35	1,914.23	2,545.88	57,018.13	4,460.11			
2	57,018.13	1,996.92	2,463.18	55,021.20	4,460.11	0.4127	0.5286	0.9413
1st Year		3,911.15	5,009.06		8,920.21			
3	55,021.20	2,083.19	2,376.92	52,938.02	4,460.11			
4	52,938.02	2,173.18	2,286.92	50,764.83	4,460.11	0.4491	0.4921	0.9413
2nd Year		4,256.37	4,663.84		8,920.21			
5	50,764.83	2,267.06	2,193.04	48,497.77	4,460.11			
6	48,497.77	2,365.00	2,095.10	46,132.77	4,460.11	0.4888	0.4525	0.9413
3rd Year		4,632.07	4,288.14		8,920.21			
7	46,132.77	2,467.17	1,992.94	43,665.60	4,460.11			
8	43,665.60	2,573.75	1,886.35	41,091.85	4,460.11	0.5319	0.4094	0.9413
4th Year		5,040.92	3,879.29		8,920.21			
9	41,091.85	2,684.94	1,775.17	38,406.91	4,460.11			
10	38,406.91	2,800.93	1,659.18	35,605.98	4,460.11	0.5789	0.3624	0.9413
5th Year		5,485.86	3,434.35		8,920.21			
11	35,605.98	2,921.93	1,538.18	32,684.06	4,460.11			
12	32,684.06	3,048.15	1,411.95	29,635.90	4,460.11	0.6300	0.3113	0.9413
6th Year		5,970.08	2,950.13		8,920.21			
13	29,635.90	3,179.83	1,280.27	26,456.07	4,460.11			
14	26,456.07	3,317.20	1,142.90	23,138.86	4,460.11	0.6856	0.2557	0.9413
7th Year		6,497.04	2,423.17		8,920.21			
15	23,138.86	3,460.51	999.60	19,678.36	4,460.11			
16	19,678.36	3,610.00	850.11	16,068.36	4,460.11	0.7461	0.1952	0.9413
8th Year		7,070.51	1,849.70		8,920.21			
17	16,068.36	3,765.95	694.15	12,302.41	4,460.11			
18	12,302.41	3,928.64	531.46	8,373.77	4,460.11	0.8120	0.1293	0.9413
9th Year		7,694.59	1,225.62		8,920.21			
19	8,373.77	4,098.36	361.75	4,275.41	4,460.11			
20	4,275.41	4,275.41	184.70	0.00	4,460.11	0.8836	0.0577	0.9413
10th Year		8,373.77	546.44		8,920.21			

