



# National Electric Power Regulatory Authority Islamic Republic of Pakistan

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**Registrar**

No. NEPRA/ADG(Tariff)/TRF-172/5973-78

May 02, 2024

**Subject: Decision of the Authority in the matter of Motion for Leave for Review Filed by Star-Hydro Power Limited (SHPL) against NEPRA's Decision in the matter of 147 MW Patrind Hydropower Project Dated July 29, 2020**

Dear Sir,

Enclosed please find herewith the subject Decision of the Authority jointly signed by the Chairman and three Members of the Authority along with Annex-I and Separate Determination of Ms. Amina Ahmed, Member (Law) (total 18 pages) in the matter of Motion for Leave for Review Filed by Star-Hydro Power Limited (SHPL) against NEPRA's Decision in the matter of 147 MW Patrind Hydropower Project dated July 29, 2020.

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

Enclosure: As above

(Engr. Mazhar Iqbal Ranjha)

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

**Copy to:**

1. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad
2. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad
3. Secretary, Ministry of Inter Provincial Coordination, (Secretariat of Council of Common Interests), Government of Pakistan, Cabinet Block, Cabinet Secretariat, Islamabad
4. Chief Executive Officer, Central Power Purchasing Agency Guarantee Limited (CPPA-G), Shaheen Plaza, 73-West, Fazl-e-Haq Road, Islamabad
5. Chief Executive Officer, Star Hydro, K-Water Global, Usman Squar, 3<sup>rd</sup> & 4<sup>th</sup> Floor, Main Double Road, E-11/2, Islamabad
6. Managing Director, National Transmission & Despatch Company Limited 414-WAPDA House, Lahore



**DECISION OF THE AUTHORITY IN THE MATTER OF MOTION FOR LEAVE  
FOR REVIEW FILED BY STAR HYDRO POWER LIMITED (SHPL) AGAINST  
NEPRA'S DECISION IN THE MATTER OF 147 MW PATRIND HYDROPOWER  
PROJECT DATED JULY 29, 2020**

1. Star Hydro Power Limited (herein referred as the "Project Company" or "SHPL") has setup a 147 MW Patrind Hydro Power Plant (the Project) in the territory of Azad Jammu and Kashmir (AJ&K).
2. The Authority granted permission to CPPA-G for procurement of power from Patrind Hydropower Project on September 29, 2008 and thereafter approved the levelized feasibility stage Tariff of Rs 4.8223/kWh (US cents 6.1042/kWh) at reference exchange rate of PKR 79 per US Dollar) vide decision dated February 13, 2009.
3. The Authority on January 27, 2012, under Regulation 5(6) of IPPR, approved the Power Purchase Agreement between CPPA-G and SHPL for procurement of power from 147 MW Patrind Hydropower Project, at negotiated tariff of Rs. 7.0496/kWh (US cents 8.2936/kWh at US\$/PKR exchange rate of Rs. 85.0) levelized over a period of 30 years starting from Commercial Operation Date (COD).
4. Modification petition was also filed by SHPL on August 16, 2018 concerning an increase of USD 7.872 million in the Project Cost (Advisory Cost, Company Cost, IDC, Security Cost, Environment & Social Cost) due to certain conditions, circumstances and requirement by the provincial governments. Decision in the matter was issued by the Authority on June 09, 2020. The modification petition filed by CPPA-G on behalf of the SHPL was disposed of with the following decision made appearing in its para 26:

*26. Given the above, the Authority considers that the modification petition filed by the CPPA-G on behalf of SHPL does not warrant any change in the approved tariff. However, the following matters shall be addressed in the SHPL's COD adjustment request:*

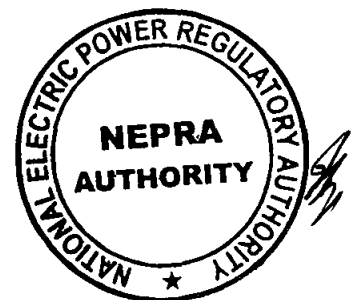
- i. Deduction of USD 18.094 million from the EPC cost.*
- ii. Deduction in civil works cost escalation cost consequent to deduction of above EPC cost.*
- iii. Consideration of additional security cost based on verifiable documentary evidence on the condition that the same is not claimed under any other head of the approved Project Cost.*

*27 In light of the above, the modification petition is disposed of.*

5. CPPA-G, vide letter dated August 31, 2018, forwarded the petition for Adjustment at COD submitted by SHPL for 147 MW Patrind Hydropower Project. The Authority on July 29, 2020

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Decision of the Authority in the matter of Motion for Leave for Review filed by Star Hydro Power Limited (SHPL) against NEPRA's decision in the matter of 147 MW Patrind Hydropower Project dated July 29, 2020

determined the COD stage tariff for SHPL in pursuance to SHPL's award of tariff at Rs. 8.3924/kWh (US cents 8.3170/kWh @ Rs. 100.91/US\$)

6. Aggrieved by the above decision of the Authority in the matter of Tariff Adjustments at Commercial Operation Date (COD) of 147 MW Patrind Hydropower Project ("**Impugned Decision**"), SHPL filed a review motion on August 28, 2020. Detailed written submissions were also submitted by SHPL on October 23, 2020 and October 28, 2020.

**Proceedings**

7. The Authority admitted the subject review motion and decided to hold a hearing in the subject matter which was later held on October 13, 2020 at NEPRA Tower, Ataturk Avenue (East), G-5/1, Islamabad.
8. Due to change in the composition of the Authority, it was deemed appropriate and necessary to rehear the matter which was initially fixed for September 12, 2023 however it was adjourned thrice on the request of SHPL and finally held partially once on September 26, 2023, and reconvened on January 12, 2024.

**Grounds of Review Motion**

9. SHPL, through the aforementioned review motion, presented the following grounds for the consideration and decision of the Authority. It was observed that SHPL merely listed these grounds for review without providing any detailed reasoning ground-wise.
- i. Deduction of USD 18 million from the EPC Cost;
  - ii. Disallowance of indexation for onshore EPC costs;
  - iii. Disregarding prudently incurred EPC Costs;
  - iv. Disallowance of non-EPC works and land related cost; and
  - v. Disallowance of costs for NTDC's delay in the Project COD
10. SHPL, through additional submissions to the review motion dated October 23, 2020, presented the following grounds for accompanied by detailed information pertaining to each claim:
- i. Onshore EPC Cost
  - ii. Insurance during Operation
  - iii. PPA Dispute Resolution
  - iv. Debt Mismatch
  - v. Design Change
  - vi. Land Cost

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vii. Company Operation Cost

**Prayer Sought**

11. Prayer Sought by SHPL is as follows:

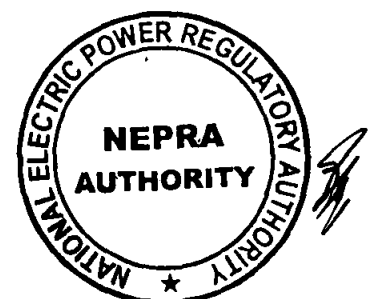
- i. Accept the Review Motion;
- ii. Allow the cost prayed for in the COD Adjustment Petition and the Tariff Modification Petition, without any deductions (see Para 26 of the Tariff Modification Review Determination) and within a specified time frame, and allow the Petitioner to make further amendments in the COD Adjustment Petition and the Tariff Modification Petition, as deemed appropriate in the lights of Expert's decision, etc.;
- iii. Petitioner may be granted ample opportunity of hearings and representations; and
- iv. Decide the instant Review Motion expeditiously and without delay;
- v. Any other relief which is just, proper and better may also be awarded.

**SHPL's head-wise submission**

12. **Onshore EPC Cost:** The primary concern raised by SHPL regarding Impugned Decision pertains to the reduction of the EPC Onshore Cost, resulting in an impact of \$33 million. At the COD Stage, the Onshore EPC Cost of \$216 million was not subjected to exchange rate variation indexing. According to SHPL, this decision was predicated on the observation by the Authority that although payments were made in USD to the EPC contractor, the contractual nature of the onshore agreement remained local. SHPL asserted that all payments to the EPC Contractor were indeed made in USD. The EPC Contract itself was entirely denominated in USD and was approved by NEPRA without any objections raised. Moreover, the ECC decision dated May 23, 2027, directed NEPRA to accept USD-denominated EPC contracts. NEPRA's Impugned Decision is contrary to past decisions adopted by NEPRA in projects akin to SHPL, such as Laraib Energy (New Bong Hydropower) & Orient Power Company.
13. **Insurance during Operation:** SHPL stated that in the Impugned Decision insurance during operation was not allowed USD indexation, on the basis that it was paid by SHPL in PKR, constituting local expenditure. SHPL argued that NEPRA cannot introduce deviations from PPA/EPC determinations (indexation/adjustments). SHPL emphasized that over 98% of the insurance coverage is provided by a foreign insurer (re-insurer), and placed on record the contracts/invoices of the Re-Insurer wherein the premium in USD is adjusted for exchange rate variation before invoicing. Furthermore, SHPL underscored the role of SBP's approval before procuring the insurance, affirming its USD-denominated nature.

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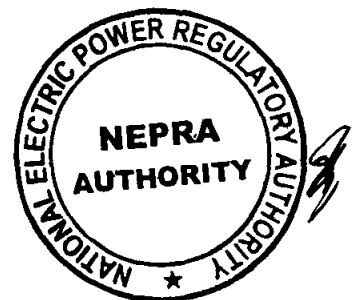




14. **PPA dispute resolution:** SHPL experienced a construction period delay of 7 months and 19 days from the Required Commercial Operation Date (“RCOD”) March 20, 2017, to the Actual Commercial Operation Date (“ACOD”) i.e., November 08, 2017, due to the non-availability of Interconnection Facilities by the Power Purchaser. The delay issue was under dispute and pending adjudication by an expert (Mr. Badr-ul-Murtiza appointed in terms of section 18.2 of the PPA). In September 2020, the Expert issued a decision in favor of SHPL, acknowledging 180 days of delay attributable to NTDC, as per clause 14.6 of the expert decision. SHPL, in light of the Expert report, requested NEPRA to index the disputed amount (i.e., Rs. 616 million) for inflation indices as per the decision of expert appointed under the approved PPA and also allow ROEDC of the delayed period as per Clause 6.5(b) of the PPA.
15. **Debt Mismatch:** SHPL argued that NTDC's delay has been recognized by the Expert under the PPA. The delay in COD led to a delay in debt repayment, compelling SHPL and sponsors to make two (2) principal repayments out of their own funds. SHPL urged the Authority to refrain from penalizing the Company for delays attributable to NTDC or Government Institutions, as per NEPRA's precedent. Therefore, SHPL requests reconciliation of the debt repayment schedule.
16. **Design Change:** The Authority's Decision dated June 09, 2020, in the matter of SHPL's Modification Petition, approved the deduction of USD 18.094 million from the EPC Cost, based on the Minutes of the Panel of Experts (PoE) of PPIB communicated to NEPRA. At the COD Stage tariff, a reduction of USD 15.298 million was made from the total Onshore EPC Cost of Rs. 18.418 billion (\$216.684 million @ Rs. 85/\$), resulting from the non-dollar indexation of the amount of USD 18.094 million @ Rs. 85/\$. SHPL stated that regarding Design Change, only NEPRA is mandated to determine the same. SHPL asserts that at the EPC Stage, feasibility-stage design changes were accepted by NEPRA without PoE's approval. Moreover, SHPL points out its initial referral of the matter of Design Change to WAPDA in March 12, 2015, wherein WAPDA capped the EPC Cost allowed at EPC Stage. SHPL contended that as a cost-related matter, it falls within the mandate of NEPRA. This recognition was acknowledged by PoE in a letter dated February 13, 2020, stating, “NEPRA may consider in the context of NEPRA's Mechanism of Determination of Tariff for Hydropower.”.
17. **Land Cost:** A cost of Rs. 307 million was deducted from SHPL's Land Cost on account of no documentary evidence and unrelated land costs.
  - i. **Discount of \$1.8 million:** SHPL argued that the Authority's determination to reduce \$1.8 million has the effect of disallowing prudent costs. SHPL requested the Authority to deduct the discount of \$1.8 million from the claimed amount rather than the assessed amount of Land expenditure.

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- ii. **Disallowed Land Cost:** SHPL contended that the deduction of Rs. 53.828 million in KPK Land being accrual shall be paid shortly, therefore, the Authority may allow recovery of the same. SHPL also requested the Authority to provide a provision for future recovery of the accrued cost in case it is paid in the future.
  - iii. **Technical College:** SHPL asserted that the deduction of Rs. 136 million in KPK Land on account of the Technical College may be allowed recovery as a future obligation (as previously allowed in Karot Hydropower) or waive off the fulfillment of this need if not allowed.
  - iv. **Road Repair:** SHPL argued that it may be allowed prudently incurred cost on roads under the KPK Land Agreement.
18. **Company Cost:** According to SHPL, Company cost like onshore EPC cost and insurance was not allowed USD indexation in the Impugned Decision. SHPL claimed that in all the precedent cases, NEPRA has allowed the Company Cost denominated in USD despite it being paid in PKR. SHPL also claimed additional costs incurred due to delays in Financial Close, which are attributable to Government Institutions on account of procedural delays.

#### Comments of CPPA-G

19. CPPA-G vide letter dated February 16, 2016 stated that SHPL has sought relief from LCIA while they had already filed review application to NEPRA. SHPL has claimed the cost of USD 394.561 million in LCIA petition, whereas the claimed cost in Petition is USD 420.128 million. SHPL's request for review is contrary to the EPC tariff determined in PKR; as per the tariff and the PPA which reflects the same, they should have incurred the onshore costs in PKR but instead contravened the Authority's EPC stage determination and incurred said costs in USD. Consequently, SHPL is before the Authority seeking to have its contravention ratified by the Authority. Table I expressly covers the major part of the amount of Onshore EPC Cost - PKR 14.3 billion (or around 78% of the total Onshore EPC Cost of PKR 18.418 billion). Table I, the relevant formula, and each component of the formula refer to amounts in PKR. No other currencies are referred to in Section I, Annex V of Schedule I to the PPA. Evidently, NEPRA's EPC Reference Tariff Determination, and the Parties incorporation of the same into the PPA, confirms that the Onshore EPC Cost, and in particular PKR 14.3 billion in relation to civil works costs has to be works cost, which was to be priced, calculated and incurred in PKR. If, hypothetically, said payments were to be assumed in USD, the price of the components identified in Schedule-I to the PPA would exceed the actual prices thereof escalated pursuant to the civil escalation mechanism and would render ineffective the principal of prudence as claimed by SHPL. SHPL has already agreed on civil costs in Rupee terms as per PPA and therefore all costs related to the onshore EPC contract which involves local procurement and the works carried out in Pakistan ought to have been priced and

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paid in the local currency (PKR, not USD). Consumers of Pakistan cannot bear the burden of payments made by SHPL to DAEWOO in dollars, the cost of which is not prudent.

20. SHPL vide its communication dated March 18, 2024 submitted a copy the order of the Lahore High Court, related to SHPL's application for recognition and enforcement of the Award, wherein at para 8 of the judgment sheet stated that *"In view of above, this application is partly allowed and the Award is upheld while deducting the amount at specified in clause (d) of paragraph 203 of the Award"* which is USD 16.452 million, comprising of USD 9.507 million as Principal Debt Repayment and USD 6.945 million as Delayed payment rate.
21. Argument heard and record perused.
22. As per regulation 3(2) of the National Electric Power Regulatory Authority (Review Procedure) Regulations, 2009, *"any party who is aggrieved from any order of the Authority and who, from the discovery of new and important matter of evidence or on account of some mistake or error apparent on the face of record or from any other sufficient reasons, may file a motion seeking review of such order"*. In the instance case, it is observed that the majority of the submissions made in the Review Motion were already deliberated upon in the impugned decision. SHPL has failed to place any additional evidence regarding discovery of any new or important fact nor has highlighted any mistake or error apparent on face of record. In view of the above, the Authority is of the view that only the following grounds merit consideration:-
23. **Insurance during Operation:** The Authority has considered the SHPL's submissions during the review motion regarding insurance during operation and is of a view that submissions have merit and sufficient reasons exist to review the same and therefore the Authority has decided to permit exchange rate variation on Operational Insurance costs, the provision of which is already mentioned in the Impugned Decision at para 7 (II) (iii). Further it has come to Authority's attention that a slight correction is necessary in the re-establishment of the Reference Insurance Component of SHPL. Initially, at the time of EPC stage tariff determination dated January 27, 2012 the Reference Insurance Component was Rs. 139.6308/kW/M, which was based on EPC Stage, 1% of EPC Cost of USD 2.897 million, however it should have been re-established using the 1% of the assessed EPC Cost at COD Stage, i.e., USD 2.589 million @ Rs. 101.36/\$. This adjustment in the Reference Insurance Component shall revise the Reference EPC Stage Insurance Component of Rs. 139.6308/kW/M to a Reference COD Stage Insurance Component of Rs. 148.7869/kW/M. Additionally, the Authority has also decided that this COD Stage Reference component of Rs. 148.7869/kW/M shall be utilized for all subsequent annual adjustments of Operational Insurance component. As a consequential change, the first year indexed insurance component appearing as Rs 175.0862/kW/M in the Impugned Decision shall be replaced with Rs 148.7869/kW/M. For clarity since the reference insurance component has been reestablished through instant determination, the

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insurance component for the first year of operations from COD shall be revised, for which SHPL shall approach NEPRA via CPPA for necessary adjustment.

24. **PPA Dispute Resolution:** In light of SHPL's claim regarding indexation of LD amounts as per Expert's decision dated September 2020 and allowance of ROEDC for the disputed period as per Section 6.5(b) of the PPA, the Authority acknowledges that the LCIA Award decision of May 18, 2022, supersedes the Expert decision regarding indexation of LDs. Therefore, the matter is to be addressed from that point onward. Furthermore, the obligation of ROEDC for the delayed period is arising because of interconnection delays on part of NTDC. This matter has already been settled by the Authority in the SHPL's Modification decision dated June 09, 2020 wherein it was decided that the cost of non-performance of any party shall not be passed on to consumers. The relevant para of the said decision is reproduced below.

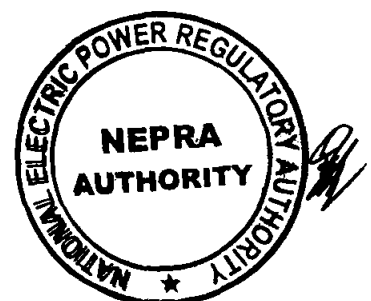
*24 Regarding the additional costs claimed by the Project Company due to delay in achieving COD is in dispute and pending before an expert appointed under the terms of the PPA. Regardless of the outcome, the Authority as a matter of principle don't allow additional cost to be passed on to consumers because of inefficiencies of any party NTDC, Project Company or CPPA-G etc. therefore, the request of SHPL in this regard is rejected.*

25. Regarding the exclusion of the principal debt from SHPL's COD tariff, as claimed in the modification petition dated July 13, 2022, the Authority has reviewed the LCIA award and the judgment of the Hon' able Lahore High Court regarding enforcement of the award. The Hon' able Lahore High Court has partly allowed the application of SHPL by recognizing the award while deducting the amount at clause (d) of para 203 of the award. Therefore, to the extent of payment of USD 16,452,807/- being the Principal Debt Damages plus interest at the Delayed Payment rate, the award has not been recognized or enforced. It has also been brought to the knowledge of the Authority that SHPL has filed an Intra Court Appeal before the division bench of the Lahore High Court, which is pending for adjudication. Therefore, in the instant case, as of now, there is no enforceable award in field regarding award of Principal Debt Damages. Once a conclusive and final decision with respect to the recognition and enforcement of the award is passed by the Court of apex jurisdiction, only then can the award to this effect be enforced. Regardless, the Authority is mindful of the fact that double benefit should not be extended to SHPL. This intent is also reflected in the award itself. Therefore, the Authority has decided that subject to the final decision of the pending litigation regarding recognition and enforcement of LCIA award from a court of apex jurisdiction and in case the award is recognized, enforced and implemented to this effect, the Principal debt repayment from SHPL's COD tariff shall be excluded.

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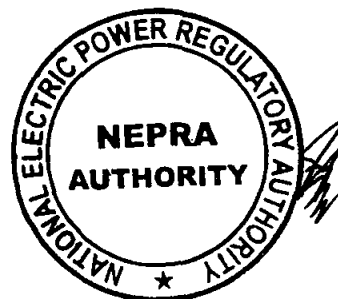






26. **Debt Mismatch:** Following SHPL's submissions under the review motion, the Authority finds no precedent where debt repayment has been allowed for the period before the COD date. Therefore, SHPL's claim is denied.
27. **Design Change:** In response to SHPL's submissions under the review motion, the Authority directed PPIB to review the matter again on November 11, 2020. A report from PoE-II (PPIB) received on July 23, 2021, revised the deduction for Design Change from USD 18.094 million to USD 13.995 million, providing a relief of USD 4.098 million. However, certain observations in the revised assessment raised concerns, particularly regarding the reduction in the size of four gates by 40%, which should logically result in a decrease in costs, while the revised assessment indicated an increase in costs instead. Despite seeking clarification from PPIB, no clear response was provided to explain this discrepancy. Consequently, the Authority has decided to maintain its earlier decision in this regard.
28. **Land Cost:** Following SHPL's submissions under the review motion regarding Land Cost, the Authority has made the following determinations:
- Discount of \$ 1.8 million:** The Authority notes that deducting \$ 1.8 million from the claimed amount rather than the assessed amount of Land expenditure would result in allowing any deduction made in the COD Decision, based on unrelated or non-documented costs. Therefore, the Authority decided to maintain its earlier decision regarding this matter.
  - Disallowed Land Cost:** The Authority noted that the deducted amount of Rs. 53.828 million under KPK Land have not been paid by SHPL yet. Additionally, regarding the deduction of Rs. 6.054 million falling in the extended period and payment obligation occurring prior to COD, the Authority noted that the acquisition of Land was on the directions of Deputy Commissioner, Muzaffarabad, and the project company bears responsibility for the wall breakage leading to the land submersion. Therefore, the Authority decided to maintain its earlier decision regarding this matter.
  - Technical College & Road Repairs:** The Authority has observed that no expenditure has been incurred for technical college and that the road repair cost falls in the delayed

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period which is not recognized by the Authority. Consequently, as there is a lack of evidence despite the project achieving COD back in 2017, these items cannot be trued up. Therefore, it has been decided to uphold the Authority's previous decision regarding this matter.

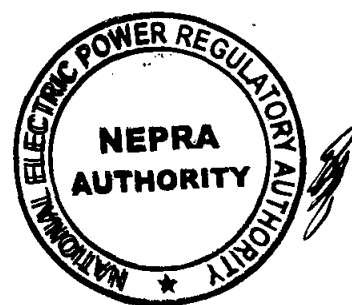
- iv. **Company Operation Cost:** Regarding SHPL's claim for allowance of dollar indexation on Company Cost, the Authority noted that since expenditure was made in local currency, exchange variations are not warranted. Therefore, the Authority decided to maintain its earlier decision regarding this matter.

### Order

29. In light of the circumstances outlined above, the Authority concludes that the review motion submitted by SHPL does not necessitate any alteration to SHPL's COD Decision dated July 29, 2020, apart from permitting exchange rate variation on Operational Insurance, which already been considered and allowed under Order para 7 (II) (iii) of the COD Decision dated July 29, 2020.
30. Furthermore, considering the discussion on Operational Insurance outlined in paragraph 23 above, the Authority has decided that Reference Insurance Component of SHPL at COD Stage, as mentioned as Rs 175.0862/kW/M shall be replaced with Rs. 148.7869/kW/M, wherever appearing. Additionally, the Authority has also decided that this COD Stage Reference component of Rs. 148.7869/kW/M shall be utilized for all subsequent annual adjustments of Operational Insurance. Accordingly as revised Tariff Table indicating this correction is attached as **Annex-I**.
31. Regarding the exclusion of the Principal debt repayment from SHPL's COD tariff in pursuance to LCIA award and as claimed under the modification petition dated July 13, 2022, the Authority has decided that subject to the final decision of the pending litigation regarding recognition and enforcement of LCIA award from a court of apex jurisdiction and in case the award is recognized, enforced and implemented to this effect, the Principal debt repayment from SHPL's COD tariff shall be excluded from SHPL's tariff.
32. Consequently, in light of the foregoing, the review motion is hereby disposed of.

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Decision of the Authority in the matter of Motion for Leave for Review filed by Star Hydro Power Limited (SHPL) against NEPRA's decision in the matter of 147 MW Patrind Hydropower Project dated July 29, 2020

33. The above Order of the Authority shall be notified in the official Gazette in terms of Section 31(7) of the Regulations of Generation, Transmission and Distribution of Electric Power Act, 1997.

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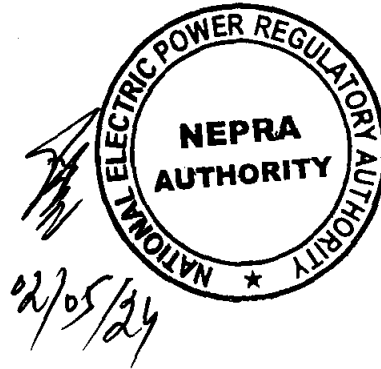
**AUTHORITY**

Mathar Niaz Rana (nsc)  
Member

Engr. Maqsood Anwar Khan  
Member

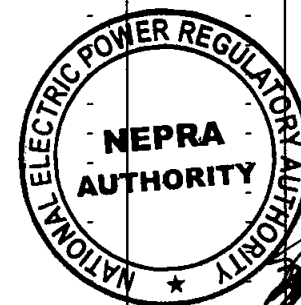
Engr. Rafique Ahmed Shaikh  
Member

Waseem Mukhtar  
Chairman



**STAR HYDRO POWER LIMITED**  
Tariff Table

Year	Variable O&M Local	Water Use Charge	Fixed O&M Local	Fixed O & M Foreign	Insurance	Return on Equity	ROE During Construction	Loan Repayment	Interest Charges	Total Tariff	Tariff For Comparison Purposes
	Rs./kWh	Rs./kWh	Rs. / kW/M	Rs. / kW/M	Rs. / kW/M	Rs. / kW/M	Rs. / kW/M	Rs. / kW/M	Rs./kW/M	Rs. / kWh	¢ / kWh
1	0.0344	0.1500	107.6680	162.3038	148.7869	793.1840	484.0221	815.5976	855.0705	9.5718	9.4859
2	0.0344	0.1500	107.6680	162.3038	148.7869	793.1840	484.0221	866.9291	803.7390	9.5718	9.4859
3	0.0344	0.1500	107.6680	162.3038	148.7869	793.1840	484.0221	921.4912	749.1768	9.5718	9.4859
4	0.0344	0.1500	107.6680	162.3038	148.7869	793.1840	484.0221	979.4874	691.1806	9.5718	9.4859
5	0.0344	0.1500	107.6680	162.3038	148.7869	793.1840	484.0221	1,041.1337	629.5344	9.5718	9.4859
6	0.0344	0.1500	107.6680	162.3038	148.7869	793.1840	484.0221	1,106.6598	564.0082	9.5718	9.4859
7	0.0344	0.1500	107.6680	162.3038	148.7869	793.1840	484.0221	1,176.3100	494.3581	9.5718	9.4859
8	0.0344	0.1500	107.6680	162.3038	148.7869	793.1840	484.0221	1,250.3437	420.3243	9.5718	9.4859
9	0.0344	0.1500	107.6680	162.3038	148.7869	793.1840	484.0221	1,329.0370	341.6311	9.5718	9.4859
10	0.0344	0.1500	107.6680	162.3038	148.7869	793.1840	484.0221	1,412.6830	257.9851	9.5718	9.4859
11	0.0344	0.1500	107.6680	162.3038	148.7869	793.1840	484.0221	1,501.5934	169.0746	9.5718	9.4859
12	0.0344	0.1500	107.6680	162.3038	148.7869	793.1840	484.0221	1,596.0996	74.5684	9.5718	9.4859
13	0.0344	0.1500	107.6680	162.3038	148.7869	843.1359	484.0221	-	-	5.0527	5.0073
14	0.0344	0.1500	107.6680	162.3038	148.7869	843.1359	484.0221	-	-	5.0527	5.0073
15	0.0344	0.1500	107.6680	162.3038	148.7869	843.1359	484.0221	-	-	5.0527	5.0073
16	0.0344	0.1500	107.6680	162.3038	148.7869	843.1359	484.0221	-	-	5.0527	5.0073
17	0.0344	0.1500	107.6680	162.3038	148.7869	843.1359	484.0221	-	-	5.0527	5.0073
18	0.0344	0.1500	107.6680	162.3038	148.7869	843.1359	484.0221	-	-	5.0527	5.0073
19	0.0344	0.1500	107.6680	162.3038	148.7869	843.1359	484.0221	-	-	5.0527	5.0073
20	0.0344	0.1500	107.6680	162.3038	148.7869	843.1359	484.0221	-	-	5.0527	5.0073
21	0.0344	0.1500	107.6680	162.3038	148.7869	843.1359	484.0221	-	-	5.0527	5.0073
22	0.0344	0.1500	107.6680	162.3038	148.7869	843.1359	484.0221	-	-	5.0527	5.0073
23	0.0344	0.1500	107.6680	162.3038	148.7869	843.1359	484.0221	-	-	5.0527	5.0073
24	0.0344	0.1500	107.6680	162.3038	148.7869	843.1359	484.0221	-	-	5.0527	5.0073
25	0.0344	0.1500	107.6680	162.3038	148.7869	843.1359	484.0221	-	-	5.0527	5.0073
26	0.0344	0.1500	107.6680	162.3038	148.7869	843.1359	484.0221	-	-	5.0527	5.0073
27	0.0344	0.1500	107.6680	162.3038	148.7869	843.1359	484.0221	-	-	5.0527	5.0073
28	0.0344	0.1500	107.6680	162.3038	148.7869	843.1359	484.0221	-	-	5.0527	5.0073
29	0.0344	0.1500	107.6680	162.3038	148.7869	843.1359	484.0221	-	-	5.0527	5.0073
30	0.0344	0.1500	107.6680	162.3038	148.7869	843.1359	484.0221	-	-	5.0527	5.0073
<b>Levelized Tariff</b>	<b>0.0344</b>	<b>0.1500</b>	<b>107.6680</b>	<b>162.3038</b>	<b>148.7869</b>	<b>807.0311</b>	<b>484.0221</b>	<b>787.1593</b>	<b>420.3850</b>	<b>8.3191</b>	<b>8.2444</b>



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## DETERMINATION OF MS. AMINA AHMED (MEMBER LAW)

I have had the privilege of perusing the majority determination proffered by my learned colleagues in the matter of the review filed by Star Hydro Private Limited (SHPL) through its motion for leave for review dated 28 August 2020, its written submissions provided after the hearing on the motion for leave for review, so as to provide its complete submissions in support of the motion for leave for review, dated 23 October 2020 and the further written submissions provided in response to the case officer's request for further information dated 28 October 2020 (together the **Written Submissions**). The review pertains to the Authority's determination on SHPL's COD Tariff dated 29 July 2020 (the **Impugned COD Tariff**) and the Authority's determination on SHPL's tariff modification petition dated 9 June 2020 (the **Impugned Tariff Modification**).

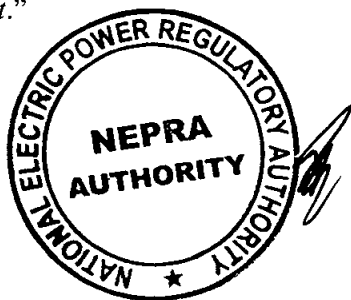
Given that the motion for leave for review was submitted and admitted by the Authority in 2020, the decision in relation to such review has been inordinately and inexcusably delayed for over 3 years. This matter should have been dealt with years ago.

The majority view of the Authority appears to be to disallow virtually every single cost claimed by SHPL in the Written Submissions for the reasons set out in the determination. With utmost respect, I disagree with the reasoning and decisions of my learned colleagues in a few matters and consider that there are sufficient reasons highlighted by SHPL and the tariff team that merit consideration. The rationale supporting my divergence from the majority determination is delineated *in seriatim* below.

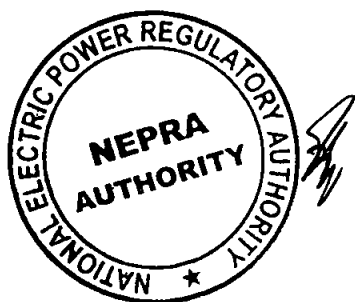
### 1. Indexation for exchange rate variation for onshore EPC cost

#### Disagreement with the majority view on the rationale for disallowance of exchange rate variation on the onshore civil works

- 1.1 Paragraph 4.1.6 of the Impugned COD Tariff states that "*at the time of determination of EPC stage tariff of the Company, the Authority approved Rs. 18.148 billion on account of EPC On-shore cost. In order to assess the project cost in US\$, the EPC On-shore cost was converted into US\$ at prevailing rate of Rs. 85/US\$. Accordingly, this cost was assessed as US\$ 216.684 million.*"
- 1.2 This is factually incorrect. Had the Authority approved and stated Rs. 18.148 billion on account of onshore EPC cost (only converted to USD to assess the total project cost in USD) at the time of determination of the EPC stage tariff of SHPL there would be no question of SHPL claiming indexation on account of foreign exchange variation on the onshore EPC cost and no dispute on the matter.
- 1.3 Paragraph 4.1.7 of the Impugned COD Tariff further goes on to state that "*at the time of COD stage tariff, the Company requested NEPRA to allow US\$ 216 million with exchange rate of Rs. 100.79/US\$. While evaluating / examining the submitted documents of the Company it was observed that this cost was required to be incurred in local currency being On-Shore contract whereas the Authority realized that the contract was made in US\$. The Authority observed that the EPC invoices which have been raised in US\$ and payments made to the EPC Contractor don't change the nature of expenditure of onshore contract with allowable variation to the extent of four variables i.e., labour, steel, cement and fuel. The Authority observed that the Company sublet the EPC Onshore to foreign companies by knowing the fact that the overall amount was assessed on this account in PKR. Thus the Company has to bear any over / under exchange rate loss on this account.*"



- 1.4 The above is overly simplistic and basically states that since onshore costs are incurred in Pakistan, they should be paid in PKR (and therefore no indexation for exchange rate variation should be allowed). Even if expenditure is to be incurred in Pakistan/PKR, prices are not fixed and there is sometimes a substantial time lag between when costs are approved in the reference tariff and when they are incurred by the sponsor/project company. Simply put, either (i) the projected increase will be 'built into' (included or provided for) the base cost by the sponsor /project company or the EPC contractor, (ii) indexation/adjustment will be requested in the form of cost adjustment/escalation indices or foreign exchange variation (or both), (iii) the sponsor/project company will bear the risk of cost escalations (effectively decreasing its return on equity) or (iv) where historic trends show increases and no escalation is allowed in the reference tariff, then the project will be considered unviable and a commercial decision will be made not to proceed. This is why, other than on certain 'fixed' costs, some form of adjustment/indexation is usually allowed even if such costs are to be incurred in PKR. This is also why, the Authority in all tariff determinations (other than a couple of recent determinations), has permitted (where this has been requested) onshore costs in foreign currency and has accordingly allowed exchange rate fluctuations on this cost component. A few cases have also been referred to by the SHPL in the Written Submissions, where the Authority has allowed exchange rate on the onshore portion of the EPC cost.
- 1.5 Having discussed what has been stated about this point in the Impugned COD Tariff (since such decision is being maintained by the majority members) it is important to examine SHPL's submissions set out in the Written Submissions on the same point.
- 1.6 SHPL has stated that *"the EPC contract and its USD-denominated cost has already been approved by NEPRA in the EPC stage tariff. At the COD-stage tariff, NEPRA cannot vary the treatment it has prescribed in the EPC-stage tariff"*. I have discussed the approval of the EPC contract below but on the principle that at the COD-stage tariff, NEPRA cannot vary the treatment it has prescribed in the EPC-stage tariff, I am in complete agreement.
- 1.7 SHPL has also stated that all payments by SHPL to the onshore EPC contractor have been made in USD. This is undisputed but should NEPRA allow all onshore EPC payments on this basis. Surely not. Sponsors/project companies should ensure that they enter into or amend their EPC contracts based on what has been permitted by NEPRA in the reference tariff or bear the risk of the differential themselves.
- 1.8 SHPL has also referred to:
- the "NEPRA approved EPC contract". SHPL explains that NEPRA asked for the EPC contract that had been entered into between SHPL and the EPC contractor (which required all payments in USD) and approved the same. This is factually incorrect. NEPRA does not approve EPC contracts and I have seen no evidence that it 'approved' the EPC contract for this project. NEPRA regularly reviews EPC contracts when determining tariffs (other than feed-in tariffs), often reducing the allowed amount in the determination in spite of signed contracts, so reviewing the contract is certainly not akin to providing approval. Again, what is important is the cost allowed in the reference tariff.
  - the decision of the Economic Coordination Committee (ECC) of the Cabinet, dated 23 May 2007 *"through which it directed NEPRA to accept USD-denominated EPC contracts"*. The spirit of the ECC decision referred to by SHPL, was to enhance competition among suppliers and contractors by including Euros, Pound Sterling and Japanese Yen as acceptable currency



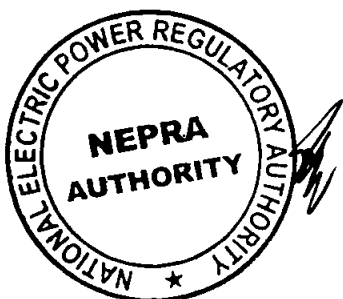
for EPC contracts and foreign financing. Furthermore, the same decision also states that “*at the COD, the capital cost be fixed in US dollars based in actual currencies of EPC Contract accepted by NEPRA at the time of tariff determination...*”. At COD stage NEPRA is required only to ‘true up’ what has been allowed and approved in the reference stage; and

- NEPRA precedents. Whilst precedents are important, what is more important, is the principle that cost escalation on certain portions of the onshore costs are required, which is why, in precedent cases, such escalations (whether in the form of indexes or foreign exchange variations, or both), have been permitted, but as I mentioned above, what is more important is what was allowed in the reference tariff as NEPRA cannot vary the treatment at the COD stage tariff from what it has allowed/approved in the reference tariff (in this case the EPC stage tariff).
- 1.9 Unlike many other hydro power project EPC stage tariffs, this EPC stage tariff is not a typical EPC tariff determination but rather an approval of the power purchase agreement initialed by SHPL and the power purchaser (the PPA). Since this project was processed under the provisions of the Interim Power Procurement Regulation, 2005 (IPPR 2005), the Authority, in exercise of its powers contained in Regulation 5(6) of the IPPR 2005 approved the PPA, the negotiated tariff and other terms and conditions, indexations, escalations etc. contained in Schedule 1 of the PPA and attached the aforementioned schedule as Annex I of the decision of the Authority dated 27 January 2012 (the **EPC Stage Tariff**). The EPC Stage Tariff does not provide any guidance on which costs are allowed in PKR and which are in USD. All reference project costs are set out in USD (even those that are incurred and paid in PKR such as land costs, custom duties, company costs, etc.). Simply put, this could either be because all costs were intended to be incurred in USD or certain costs were to be ‘locked’ in PKR, converted to USD using the then prevailing exchange rate (converted only to USD to assess the total project cost in USD, to reflect the total project cost in one currency).
- 1.10 The only other relevant provisions of the EPC Stage Tariff on this matter are:
- the cost escalation formula set out in para 1 (*One Time Adjustment in Reference EPC Cost for Civil Works cost escalation*) of Annex V (*Adjustments on Commercial Operation Date*) of Schedule 1 (*Tariff, Indexation and Adjustment*) of the PPA, Annex I of the EPC Stage Tariff (the **Cost Escalation Formula**); and
  - para 6 (Adjustments in Project Cost due to variation in US\$/Rupee parity) of Annex V (*Adjustments on Commercial Operation Date*) of Schedule 1 (*Tariff, Indexation and Adjustment*) of the PPA, Annex I of the EPC Stage Tariff.

Discussing each in turn.

#### Cost Escalation Formula

- 1.11 The Cost Escalation Formula provides for the one time adjustment to the onshore civil works cost at COD due to variation in the prices/indices of a selected number of cost elements (namely, cement, steel, fuel and labour). The Cost Escalation Formula calculates the amount of escalation allowed in the relevant month ‘n’ of the construction period. All the amounts set out in Table 1 are reference PKR amounts on which escalation is to be calculated.
- 1.12 An argument can be put forward that these amounts have been set out in the table in PKR so that the indexation on cement, steel, fuel and labour (which is also to be calculated in PKR) can be



applied and this does not necessarily mean that the dollar/rupee parity is not to be provided after the PKR indexation. That could be true, but for the last part of the Cost Escalation Formula, ' $T_n = T_n + P_n$ '.

- 1.13 ' $T_n$ ' is the 'Total Reference Amount' (the total of the reference cement price in PKR, plus the total of the reference steel price in PKR, plus the total of the reference fuel price in PKR, plus the total of the reference labour price in PKR). Each cost component of ' $T_n$ ' (i.e. cement, steel, fuel and labour) in the month 'n' needs to be indexed to relevant indices set out in the Cost Escalation Formula to calculate escalation for relevant month, the sum of which results in ' $P_n$ '. Therefore, ' $P_n$ ' provides the amount of escalation in PKR and had that been the last part of the Cost Escalation Formula, it could have been argued that the dollar/rupee parity may still be applied after the PKR indexation but the only purpose of requiring the addition of the 'Total Reference Amount' and the 'Escalated Amount' appears to be to lock the final amount in PKR (which in the last part of the Cost Escalation Formula is referred to as ' $T_n$ '). In other words, the only purpose of the last column of Table 1 is to fix the total amount in PKR.
- 1.14 This means that out of the total onshore EPC cost of USD 216.684 million, the civil works cost portion of around PKR 14.300 billion (equivalent to USD 168.2 million at reference exchange rate of PKR 85/USD 1), which was clearly stated in Table 1 of the Cost Escalation Formula, was to be locked in PKR.

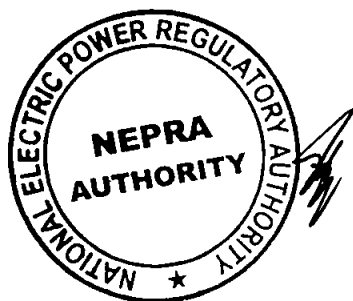
#### Paragraph 6

- 1.15 The first sentence of paragraph 6 states:

*"Actual variation in US\$/Rupee parity for payments made in foreign currency will be allowed through an adjustment in total project cost; provided that no such adjustment shall be allowed after the earlier of Commercial Operations Date or the Required Commercial Operations Date."*

- 1.16 Whilst there is no doubt that onshore EPC costs, including civil works, are part of the overall project cost and that SHPL has made payments against these costs in foreign currency, the question remains as to why this was done when the cost of civil works was locked in PKR. Did SHPL interpret the Cost Escalation Formula differently somehow? This seems unlikely for the following reasons:

- The feasibility study approved by PPIB's panel of experts, after which the LOS was issued, sets out the civil work costs with detailed break up in PKR, using PKR rates.
- The EPC tendering process, which was adopted by SHPL, based on which the EPC price of the project was increased by approx. USD 100 million (from the feasibility stage tariff to the EPC Stage Tariff), clearly required the bidders (in the RFP) to quote the local works, in PKR. Separately, the independent bid evaluation consultant also highlighted this point and recommended SHPL to ask the EPC contractor to submit the prices of local components in PKR.
- Prior to execution of the PPA, SHPL had shared its proposed adjustment mechanism for civil works cost escalation (where all the costs were set out in USD) which were discussed and revised by NEPRA (where all amounts were set out in PKR) and SHPL was instructed to ensure that NEPRA's proposed revisions were incorporated in the PPA submitted for approval. These revisions were incorporated and the revised mechanism as set out in the PPA was approved by NEPRA. This is discussed in paragraph 5 of the EPC Stage Tariff.





- NEPRA's letter dated 25 July 2011 on this very matter states that the "*table showing monthly Milestones payment schedule indicates the amount of different civil works cost in US\$ whereas the cost of such materials is considered to be in local currency and required to be adjusted based on local WPP*". This letter makes it clear that the amounts set out in the table are not just required to be in PKR for the purposes of adjustment based on local indices, but NEPRA considers and expects the cost of civil works to be locked in PKR.
- Whilst the language in various parts of Schedule 1 (Annex IV and Annex V) could have certainly been clearer and better drafted, the Cost Escalation Formula appears to be sufficiently unambiguous, especially when there is evidence that SHPL was acutely aware of NEPRA's understanding on the matter.
- SHPL did not include the last part of the Cost Escalation Formula (i.e. ' $T_m = T_n + P_n$ ') in the table set out in its EPC contract, had it done so, payments to its onshore EPC contractor would have also been locked in PKR.

1.17 Based on these factors, I am inclined to disagree with SHPL's contention that the entire onshore EPC cost should be indexed for exchange rate parity simply because payments made by SHPL were in USD, and am of the view that SHPL's request for exchange rate indexation on onshore EPC costs, amounting to PKR 14.30 billion, have been correctly disallowed under the Impugned COD Tariff (but not for the reasons set out in the Impugned COD Tariff which are being maintained in the majority determination). The provisions and underlying assumptions of the EPC Stage Tariff should apply and govern the treatment of SHPL's costs, rather than SHPL's actions.

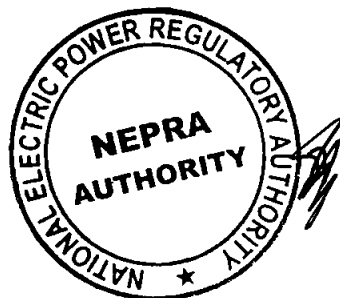
Dissent on disallowance of exchange rate variation for electrical and mechanical works

1.18 For the remaining onshore EPC cost claimed by SHPL relating to electrical and mechanical works, amounting to USD 48.443 million, it is worth noting that this cost was neither adjusted on account of exchange rate variation, nor on account of escalation as per the Cost Escalation Formula provided in the PPA, meaning that this would be the first time that the Authority would adjust or true up this portion of SHPL's onshore EPC cost and not be limited by any prior interpretations or limitations placed by the Authority in the EPC Stage Tariff. Keeping in view that (i) this cost has in fact been incurred by SHPL in foreign currency and is not included in the Cost Escalation Formula and (ii) the determination for Laraib Energy (the first IPP hydro power project which achieved financial close and COD prior to SHPL) and various other subsequent large hydro power projects undertaken by the private sector, the portion of onshore EPC costs not included in the cost escalation formula have been treated as USD based and have been allowed exchange rate variation; it is my view that there is absolutely no justifiable reason for the Authority not providing SHPL with exchange rate indexation for this portion of the onshore cost. For this reason, I respectfully disagree with my learned colleagues.

## 2. Design Change

Dissent on disallowance of USD 4.098 million which should have been extended to SHPL

2.1 SHPL is also aggrieved by the Authority's decision in the Impugned Tariff Modification, whereby the onshore EPC cost was reduced by USD 18.094 million on account of a design change in SHPL's



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power plant. This reduction was made by the Authority on account of recommendations made by PPIB's panel of experts (the POE).

- 2.2 SHPL contends in the Written Submissions that with “*regards to the cost implications resulting from a design change, only NEPRA is mandated to determine the same*”. This is correct not only with respect to the cost implications resulting from a technical change but in respect of any and all aspects of the tariff. With respect to cost implications of technical aspects NEPRA can choose to assess the matter in-house but can also rely on the recommendations of external specialists (whether from the private sector or otherwise, but in either case, appropriate specialists/experts have to be selected for the matter, relevant scope defined, who are not conflicted and are extremely competent). Where the matter has been examined and assessed by external specialists, NEPRA can opt to rely on such recommendations (either because it assesses such recommendations as correct after reviewing the same or where it thinks the external specialists/experts are better suited and have the technical know-how and project/area specific knowledge, which NEPRA's internal team does not, then, without question). In all cases the affected party has to be provided the opportunity to question and provide its input on the recommendations.
- 2.3 After the Impugned Tariff Modification, in response to SHPL's submissions under the review motion, NEPRA directed PPIB to review the matter again and the reconstituted POE revised the deduction for design change from USD 18.094 million to USD 13.995 million. Interestingly even CPPAG has requested NEPRA to consider the recommendations of the reconstituted POE and allow the differential to SHPL.
- 2.4 Given that the initial deduction was made **solely** on the recommendation of the POE (mechanically without question, presumably on the basis that the POE's were better suited and had the technical know-how and project/area specific knowledge NEPRA's internal team did not), and these recommendations have now been revised by the same specialists/experts, the principle of consistency demands that the differential amounting to USD 4.098 million be extended to SHPL.

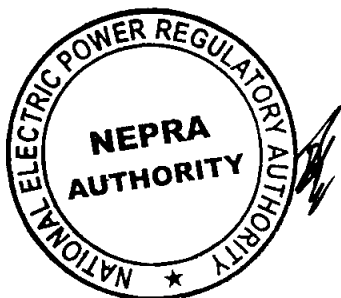
### 3. ROEDC under section 6.5 (b) of the PPA

#### Dissent on disallowance of adjustment to ROEDC for the extended construction period

- 3.1 The ‘Return on Equity’ during the extended construction period on account of delay should be payable to SHPL through updating the ‘Reference Tariff’ since this is explicitly stated in the NEPRA approved PPA. If the Authority is of the view that this amount should be recovered from NTDC (since it was due to its delay in timely providing the required grid) then the Authority should deduct such amount from NTDC's tariff or recover such amount in some other way which does not involve depriving SHPL from amounts expressly provided for in the NEPRA approved PPA.

### 4. Reduction/ adjustment of principal debt payments

- 4.1 The decision of the learned colleagues is concurred with, except to the extent that this issue relates to the modification request filed by SHPL dated 13 July 2022 and is not raised in the Written Submissions. Since it is not a subject matter of the instant review, it is appropriate that this issue be addressed by NEPRA while deciding the said modification petition.



## 5. Remaining Issues

On the remaining issues, I agree with the reasoning and determination of my learned colleagues.

Before parting with this determination, I must put emphasis on the clear provision of the NEPRA Act that protecting the interest of the companies providing electric power services is an equally important function of the Authority. Non enforcement of clear stipulations of the approved power purchase agreements / NEPRA's own tariff determinations not only compromises the legal principles of sanctity of contracts / finality of tariff determinations, but also goes against the principle of legitimate expectation and promissory estoppels.



**Ms. Amina Ahmed**  
**(Member Law)**

