



Registrar

# National Electric Power Regulatory Authority

## Islamic Republic of Pakistan

NEPRA Tower, Attaturk Avenue (East), G-5/1, Islamabad  
Ph: +92-51-9206500, Fax: +92-51-2600026  
Web: www.nepra.org.pk, E-mail: registrar@nepra.org.pk

No. NEPRA/R/ADG(Trf)/IPT-12/KHPCL-2021/3297-3299

March 1, 2022

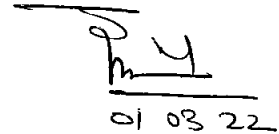
**Subject: Decision of the Authority in the matter of Tariff Modification Petition filed by Central Power Purchasing Agency Guarantee Ltd. (CPPA-G) for 1,124 MW Kohala Hydropower Project (Case No. NEPRA/IPT-12/KHPCL-2021)**

Dear Sir,

Please find enclosed herewith the subject decision of the Authority (10 Pages) in Case No. NEPRA/IPT-12/KHPCL-2021.

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

Enclosure: As above



01 03 22

( Syed Safer Hussain )

Secretary,  
Ministry of Energy (Power Division),  
Government of Pakistan  
Islamabad.

CC:

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

**DECISION OF THE AUTHORITY IN THE MATTER OF TARIFF MODIFICATION  
PETITION FILED BY CENTRAL POWER PURCHASING AGENCY (CPPA-G) FOR  
1,124 MW KOHALA HYDROPOWER PROJECT**

**INTRODUCTION**

1. Kohala Hydro Company (Private) Limited (hereinafter referred to as the “**Company**”) is established to implement a 1,124 MW run-of-river, hydropower project (hereinafter referred to as the “**Project**”) on BOOT basis located on the Jhelum River in the territories of AJ&K.
2. The Authority determined EPC stage tariff for the Project on April 02, 2018 (hereinafter referred to as the “**Tariff Determination**”) which was subsequently revised on October 11, 2018, pursuant to a review motion (hereinafter referred to as the “**Review Determination**”). The Authority awarded a levelized tariff of Rs. 8.2345/kWh at the reference exchange rate of Rs. 104.85/US\$.

**FILING OF TARIFF MODIFICATION PETITION**

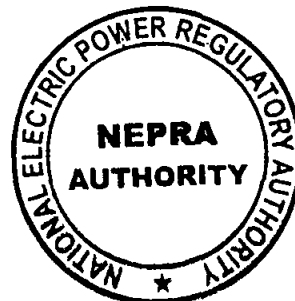
3. The Company, vide letter dated June 8, 2021, filed a tariff modification petition (hereinafter referred to as the “**Modification Petition**”) under Regulation 3 of NEPRA (Import of Power) Regulations, 2017 through CPPA-G for modification of Authority’s determination to incorporate the costs associated with the construction of Sewage Treatment Plants (“**STPs**”) in line with the decision of the ECC and the signed Tripartite Agreement.
4. The CPPA-G, vide letter dated August 9, 2021, forwarded the Modification Petition to the Authority along with the following comments in this regard:

*It is appraised that the first Environmental Approval dated 22 December 2016 referred in condition No. L(xxiv) stated:*

*“Independent arrangement shall be made for sewage disposal/ treatment and solid waste. The sewage treatment facilities/septic tanks shall be constructed at a suitable place from any permanent or seasonal water source and should not be located/ constructed in the areas where high ground water table exists.”*

*The scope of work for sewage treatment is exorbitant which was initially approved as “construction at a suitable place” mentioned above in the first approval. After two years it was increased to the area “along the river Jhelum in and around towns of Muzaffarabad/ Jhelum Valley, where necessary” in an Addendum to Environmental approval dated 28 November 2018.*

*R*      *7d*



*Considering the change in scope of work above it is also revealed that the contingency and escalation at 8% is included in capital cost of the STP projects. Provision of another change in scope at the rate of 15% was added again at total project cost on escalation and contingency. Such provision will increase the cost of STPs and will adversely affect the electricity consumer prices.*

*The Authority may substantiate the reason for change in scope of work which stated that exponential increase in Biological Oxygen Demand (BOD) of remaining reduced flow in river downstream. This happens due to sewage dilution being done by river Jhelum diversion owing to hydro power projects.*

*The Authority may rationalize the cost of STPs project while considering the significance of the exponential increase in BOD to one hydropower project.*

5. The Modification Petition was admitted by the Authority on September 06, 2021, for further processing.

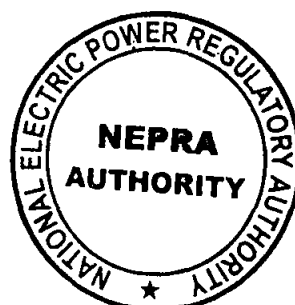
### HEARING

6. In order to proceed further, the Authority decided to conduct a hearing in the matter. Accordingly, the notice of admission/hearing, along with the list of issues, were published in newspapers on September 25, 2021, and individual notices were sent to stakeholders on October 5, 2021. Hearing was held as per the schedule on October 12, 2021, at 10:30AM. During the hearing, the representatives from the Company, PPIB, EPA AJ&K, CPPA-G and PPDB were present.

### ISSUES FOR THE HEARING

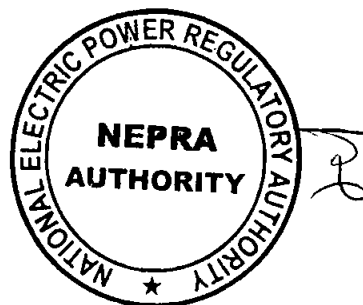
#### **Whether it is appropriate to modify the tariff after signing of IA and PPA?**

7. According to the information provided by the Company, it signed both Tripartite Agreement and Tripartite Power Purchase Agreement on June 25, 2020 while the Implementation Agreement (IA) with Government of AJ&K was signed on April 23, 2021 and the IA with Government of Pakistan was signed on May 6, 2021.
8. During the hearing, the legal counsel of the Company submitted that in the instant case, two regulations are of importance, (i) NEPRA (Import of Power) Regulations, 2017, based on which the Company has approached NEPRA through CPPA-G and (ii) NEPRA Tariff Standard Procedure Rules, 1998. Import of Power Regulations, 2017 state that the proceedings will be in accordance with NEPRA Tariff Standard Procedure Rules, 1998. According to the representative of the Company, NEPRA Tariff Standard Procedure Rules, 1998, define a petition that includes any petition that can be filed and modified. So, according to the



representative of the Company, modification stems from the definition of Petition within Tariff Standard Procedure Rules, 1998.

9. Further, during the hearing, the legal counsel of the Company submitted that NEPRA (Import of Power) Regulations, 2017, state that once a proceeding has been completed, a PPA must be executed in line with the determination. Subsequently, if there are any amendments in the PPA, prior approval of the Authority is required. According to the legal counsel of the Company, a petition has been filed for that purpose. A petition is defined to include a modification as well and if the Authority approves, an amendment in the PPA shall be done, which is provided in the NEPRA (Import of Power) Regulations, 2017, because this is import of power coming from the AJ&K.
10. The legal counsel of the Company further submitted that in this regard, in the cases of Saif, Sapphire and Orient power plants, precedence is available, where these companies approached NEPRA and got modifications after the signing of their respective IAs and PPAs and even after their financial close and CODs.
11. The Authority observed that the Project is located in AJ&K territory, hence the Modification Petition has been filed before the Authority through the "Buyer" i.e., the CPPA-G under Regulations 3 of the NEPRA (Import of Power) Regulations, 2017. It was further noted that the term "application" has been inserted via amendment vide Notification S.R.O. 634 (1)/2020 in NEPRA (Import of Electric Power) Regulations, 2017. Under Regulation 2 (1) (aa) [the insertion] "application means application made to the Authority for determination, approval, modification or revision of Rates". This indicates that application for tariff modification can be made by the applicant under Regulation 3 (Application for Determination of Rates for Import of Power) of the NEPRA (Import of Electric Power) Regulations, 2017. Section 31 of the NEPRA Act stipulates in relation to determination, modification and revision of rates. Additionally, the NEPRA (Tariff Standards and Procedure) Rules, 1998 provides for "Filing of petitions and communications" under Rule 3.
12. Therefore, in light of the aforementioned legal provisions, the Authority is adequately empowered to modify the tariff. It is also pertinent to mention here that the law does not stipulate any prohibition with respect to modification of tariff after signing of the PPA and IA; or for that matter places no restriction on the applicant to file a modification petition after signing of the PPA and IA. Hence this issue stand addressed.



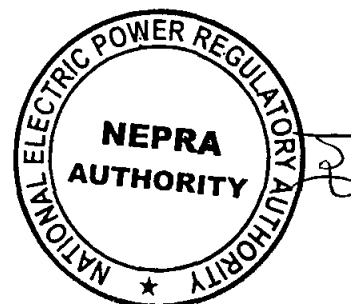
**Whether the requested capital cost of Sewage Treatment Plants of Rs. 1,679 million is justified?**

**Whether the requested cost of land of Rs. 62.87 million, estimated based on concept study, is justified?**

13. According to the Company, the AJ&K Government and AJ&K's Environmental Protection Agency (EPA) granted conditional Environmental Approval to the Project on December 22, 2016, with the following key conditions, as submitted by the Company:
- i. **The ecological flow (E-flow) downstream not to be below 30 m<sup>3</sup>/s.** The E-flow as per original design was 15m<sup>3</sup>/s.
  - ii. **Creation of at least 5 Water Bodies downstream.** The EPA anticipates reduced flow in lean period during operational phase of the Project, which will seriously affect the aesthetic beauty of the river downstream. The Water Bodies will help reclaim the aesthetics of the river and rule out the chances of encroachment, minimize the possibilities of change in microclimatic conditions, provide facilities for recreational activities, promote tourism and enhance livelihood opportunities.
  - iii. The EPA AJK, in continuation or supersession of any of the conditions listed in the approval for the construction of the Project, may impose additional conditions as and when the situation may warrant so.
14. According to the Company, it submitted an undertaking on July 18, 2017, confirming the acceptance of conditions and to reflect the understandings reached on some of the conditions. With regards to construction of 5 Water Bodies, the Company's consultants furnished their opinion that construction of Water Bodies is not technically feasible due to:
- i. high sediment load in River Jhelum, any water body created in the riverbed will be filled up with sediment deposited in the flood period,
  - ii. flow of Himalayan river, any structure constructed will be smashed away during floods.
15. According to the Company, based on the above, the EPA AJ&K agreed to review the condition of construction of Water Bodies in line with the outcome of the feasibility study for construction of water bodies in River Neelum conducted for Neelum Jhelum (NJ) HPP, followed by a feasibility study for Kohala by an independent third-party to be engaged, if necessary and in consultation with EPA AJ&K.

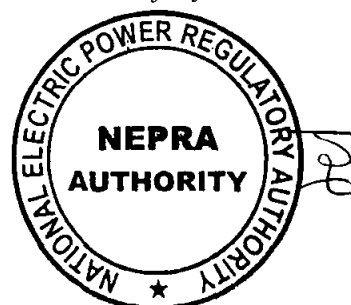
R

7a



16. According to the Company, the Authority, in its Review Determination also considered that environmental protection is one of the most important aspects of the project, however, also recognized that only prudently incurred costs can be allowed in the matter. According to the Company, the Authority further advised to revisit, among others, the requirement of construction of water bodies and consider its alternate solution, so that the Project can meet all requirements with the approved budget for Environment and Ecology.
17. According to the Company, due to the issues of NJ HPP, where E-flow was 9m<sup>3</sup>/s, the progress of Kohala remained halted as Government of AJ&K and EPA AJK linked Kohala with NJ HPP and required the Company to further increase the E-flows from 30m<sup>3</sup>/s. Further, according to the Company, the suspension of works caused huge losses to the Company.
18. The Company submitted that the main reason for the Government of AJ&K to further increase the E-flows was raw sewage of Muzaffarabad city entering the river Jhelum. Hence, according to the Company, the solution was not to increase E-flows but to develop and construction STPs. According to the Company, Government of AJ&K, vide letter dated November 28, 2018, imposed additional condition to construct STPs as per the addendum in the EPA approval (hereinafter referred to as the “**Addendum**”) to off-set the potential impact of increase in Biological Oxygen Demand (BOD). According to the Company, vide letter dated December 17, 2018, it elaborated on the technical, commercial and legal grounds and requested withdrawal of the Addendum.
19. In the meantime, according to the Company, the Environmental No Objection Certificate (ENOC) expired on December 21, 2019, and on February 25, 2020, an extension was issued with amendments in condition A (Environmental Flows) & condition K (Construction of Water Bodies & STPs) which was not accepted by the Company. Accordingly, on September 3, 2020, the ENOC was extended without the new conditions of increased E-flows of 42m<sup>3</sup>/s and mandatory construction of Water Bodies.
20. The Company submitted that since the Project was delayed due to environmental issues raised by Government of AJ&K, the Power Division submitted a case for resolution of issues to the ECC. The relevant paras of the decision of the ECC, as submitted by the Company, are as under:

*“The Sewage Treatment Plants (STPs) and Water Bodies (WBs) as required for environmental mitigation measures are integral part of the Kohala Project. Therefore, cost of STPs (including its study and detail engineering design) will be considered as part of the project cost to be approved by NEPRA under the tariff determination. Accordingly, Kohala Hydro Company Limited (KHCPL) will be provide funds for feasibility study, detail engineering design, land and construction of STPs. However, operations and maintenance of STPs shall be responsibility of the Government of AJ&K. Feasibility study of Water Bodies*



*will be done by an International Consultant and its cost will be borne by KHCPL. If construction of WBs is found to be technically and economically feasible, the cost of construction and detail engineering design of these WBs will be included in the project cost to be approved by NEPRA under tariff determination. The operation and maintenance of WBs will be responsibility of AJ&K.”*

21. Subsequent to the decision of the ECC, according to the Company, a Tripartite Agreement (TA) was entered into between the Company, Government of Pakistan and the Government of AJ&K on June 25, 2020. With regards to the STPs, the TA states:

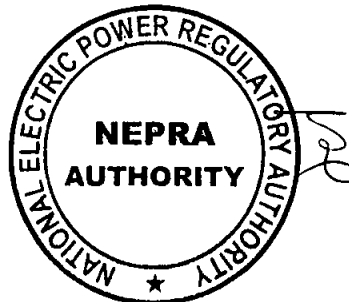
Therefore, the cost of STPs (including feasibility study and detailed engineering design) will be considered as part of project cost to be approved by NEPRA under the tariff determination.

22. With regards to the Water Bodies, the TA states:

The feasibility study of WBs will be done by an international consultant to be appointment by the Company, with consent of GOAJ&K and PPIB, and its cost will be borne by the Company. If construction of WBs is found to be technically and economically feasible, the cost of construction and detailed engineering design of these WBs will be included in the project cost to be approved by NEPRA under tariff determination.

23. According to the Company, it has engaged NESPAK to conduct the conceptual study for development and construction of STPs to treat sewage of Muzaffarabad and other population centres. The scope of the work, according to the Company includes among others, cost of assessment of STPs and the land required for STPs. Based on the updated concept study, the Company has submitted a tentative breakup of the cost of STPs and is allied infrastructure which aggregates to Rs. 1,739 million (including the cost of land Rs. 62.87 million) and provided the following breakup:

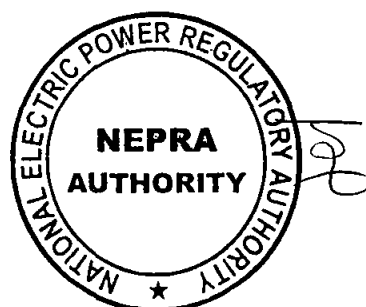
Description	Amount (PKR Million)
Costs of STPs	
Muzaffarabad Zone	436
Scattered Settlements	196
Misc. cost (Design @ 2%, Supervision @ 2%, Contingency @3% and Escalation @ 5%)	69
<b>Total STPs Cost</b>	<b>701</b>
Cost of allied Infrastructure	
Muzaffarabad Zone	670
Scattered Settlements	54



Misc. cost (Design @ 2%, Supervision @ 2%, Contingency @ 3% and Escalation @ 5%)	86
<b>Total Cost of Allied Infrastructure</b>	<b>811</b>
Grand Total (STPs & Allied Infrastructure Cost)	1,512
Provision for Scope of Variation (15%)	227
<b>Grand Total</b>	<b>1,739</b>

Description	Design (MGD)	Flows	STPs	Land	Total
			<i>Rs. Millions</i>		
Muzaffarabad	1.0		378	58	436
Scattered Settlements	0.288		192	4	196
<b>Total</b>			<b>570</b>	<b>62</b>	<b>632</b>
Misc. cost (Design @ 2%, Supervision @ 2%, Contingency @ 3% and Escalation @ 5%)					68
<b>Grand Total</b>	<b>1.288</b>				<b>701</b>

24. The Company further submits that a joint committee for supervision of feasibility study of STPs was constituted by PPIB which has approved the revised updated conceptual study on April 28, 2021, and the committee stated that the Company may approach NEPRA based on the Revised Updated Conceptual Study Report for STPs for Tariff Modification.
25. Based on the above, the Company has requested estimated capital cost of Rs. 1,679 million for construction of STPs (including feasibility study and detailed design) on Jhelum river for Muzaffarabad city and scattered settlements on Jhelum river influenced by the Project, subject to adjustment at COD as per actual costs incurred based on documentary evidence to be provided by the Company.
26. The Company has also requested the estimated cost of land of Rs. 62.87 million, based on concept study, for STPs to be allowed as per actual at COD under the head of "Land Acquisition & Resettlement".
27. During the hearing, the legal counsel of the Company submitted that the requested cost of STPs, land and WBs are a consequence of setting up the power plant, therefore, the same may be allowed. The counsel also referred to the decisions of the Authority wherein cost of freight train for coal, mining cost of Thar coal, RLNG pipelines and NHP in the case of hydro have been included in the tariff and submitted that there should be uniformity in this regard.
28. The representatives of the PPIB, during the hearing, submitted that the water bodies were part of the feasibility and the environment NOC but not the STPs. According to the representative of PPIB, the requirement STPs emerged in 2018, when NJ project started operations and diverted majority of the water of Neelum river. This raised concerns among the local community and since Kohala was the next upcoming project, therefore, ultimately the requirement of STPs, to be built from dam site to Muzaffarabad city (covering an area of 30

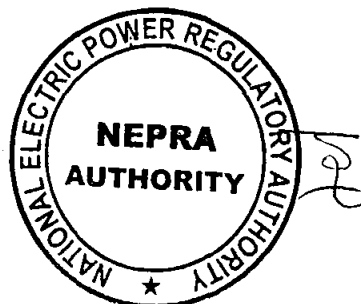




- kms) was imposed on the Company. However, the representative of PPIB was of the view that the tariff determination of 2005 contains some re-openers and these costs on account of environment may be claimed at that time, therefore, a modification at this stage may be too early. The representative of PPIB also submitted that this cost is a consequence of the setting up of the plant, therefore, the same is supported and may be allowed.
29. The representative of EPA AJ&K, during the hearing submitted that the consequence of setting up NJ shall be multiplied by setting up this project. The requested costs are the obligations of the environment NOC. The representative further referred to the 2019 decision of the honorable High Court of AJ&K wherein the court with respect to the instant project directed the proponent of the project to ensure construction of WBs and STPs well before the commencement of operations of the plant.
30. The representative of CPPA-G, during the hearing submitted that the Authority has allowed approx. USD 6 million on account of Environment and Ecology in the EPC stage tariff determination with an objective to mitigate the adverse effects to the environment, so the Company may use the already allowed budget for the requested costs. The representative further submitted that this also falls within the ambit of the Company's corporate and social responsibility towards the people of the community. Finally, the representative also submitted that the local community may also take up this responsibility as they are the ones who have to live in the vicinity and that this cost may not be imposed on the end-consumers.
31. The representative of PPDB, during the hearing submitted that generally in the hydropower sector, water use charges are being charged from each hydropower company and internationally these are utilized to provide benefit to the local community. The representative submitted that a similar mechanism in the matter may be devised.
32. After having gone through the submissions of the Company and comments of stakeholders, the Authority is of the considered view that it has already approved sufficient budget, under the heads of Environment and Ecology & CIP, to cater for the requirements of Water, Sanitation & Waste Water Management, and that it shall be imprudent to burden the end-consumers with additional allocation for installation of STPs, therefore, no additional cost is being allowed for this purpose.

**Whether it is justified to allow the requested provision for construction of Water Bodies at a later stage?**

33. The Company submitted that it has provided an undertaking dated July 18, 2017, to the EPA AJ&K confirming the acceptance of conditions and reflecting the understandings reached on some of the conditions including the construction of Water Bodies, based on the outcome of the feasibility study for construction of Water Bodies in river Neelum by NJ HPP, followed



by independent third-party feasibility study by the Company to be engaged, if necessary, in consultation with EPA-AJK.

34. The Company further states that the ECC's decision regarding Water Bodies states the following:

*"The feasibility study of Water Bodies will be done by an International Consultant and its cost will be borne by the Company. If construction of WBs is found to be technically and economically feasible, the cost of construction and detail engineering design of these WBs will be included in the project cost to be approved by NEPRA under tariff determination."*

35. Based on the above, the Company further submitted that in the Tripartite Agreement that it had entered into on June 25, 2020, the Company has agreed in line with the decision of the ECC.

36. According to the Company, it is in the process of consultation with GOAJ&K and PPIB regarding the formation of committee to confirm appointment of international consultant and later approve the feasibility study report. Given the above, the Company submitted that it reserves the right to request for modification of tariff in respect of Water Bodies based on the outcome of the feasibility study.

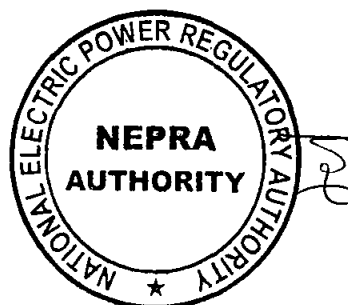
37. It is important to state that during the review proceedings, the Authority observed that the environmental protection is one of the most important aspects of the Project, however, those costs can be allowed which are incurred prudently to achieve this objective. The Project was directed to undertake all works related to environmental protection, including the construction of water bodies provided they are financially and technically viable, within the budget approved for environment and ecology i.e., USD 5.76 million. The Authority advised to revisit the environmental requirements, especially the requirement of water bodies and consider its alternate solutions, so that the Company can meet all requirements within the budget approved for Environment and Ecology.

38. Given the above, in the Review Determination, the Authority disallowed the requested cost of water bodies to the project. The relevant portion of the Review Determination is reproduced hereunder:

*For the reasons mentioned above, the cost of water bodies seems to be an imprudent cost. Therefore, it cannot be allowed in addition to the cost already allowed for Environment and Ecology, i.e. US\$ 5.76 million.*

39. In this Modification Petition, the Authority noted that the Company has again neither provided a concrete cost estimate nor submitted any feasibility study with regards to the technical and financial viability of Water Bodies. It was further noted that the Company has

R

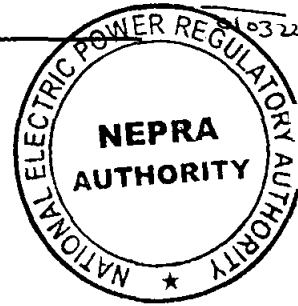


Ta


also not provided any additional evidence which would warrant the Authority to revisit its earlier decision regarding disallowance of water bodies cost. Therefore, if the Company is required to construct Water Bodies, the cost of the same shall be met with the already allowed budget of USD 5.76 million for Environment and Ecology.


40. To bring further clarity it is important to state that the return already determined in the instant case of 17% IRR shall be considered a maximum ceiling. In case the Company earns annual profit in excess of the approved return on equity (including ROEDC), then that extra amount shall be shared between the power producer and consumers through a clawback mechanism to be decided by the Authority at the time of COD tariff adjustment.
41. The above Decision of the Authority is to be notified in the official gazette pursuant to section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.

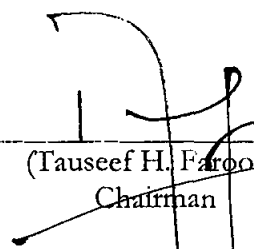
AUTHORITY



  
(Engr. Maqsood Anwar Khan)  
Member

  
(Engr. Rafique Ahmed Shaikh)  
Member

  
(Rehmatullah Baloch)  
Member

  
(Tauseef H. Farooqi)  
Chairman

(X) Additional Note:  
With reference to Para 12, I am of the considered opinion that tariff can not be modified ~~in normal circumstances~~ <sup>under specific</sup> ~~stanzas~~ <sup>in</sup> ~~TA/PPA~~ <sup>in</sup> normal circumstances (however, under specific/inavoidable circumstances, it can be done).  
\* I have been informed that there will be no change in Tariff.  
Agreed with Member Sindh → 