



**National Electric Power Regulatory Authority**  
**Islamic Republic of Pakistan**

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No. NEPRA/TRF-312/WAPDA (Hydro)-2015/286-288  
January 8, 2016

**Subject: Decision of the Authority in the matter of Motion for Leave for Review on the Determination of Bulk supply Tariff for WAPDA Hydroelectric for Financial Year 2015-16 - [Case No. NEPRA/TRF-312/WAPDA(Hydro)-2015]**

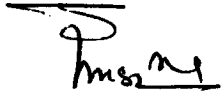
Dear Sir,

This is in continuation of this office letter No. NEPRA/TRF-312/WAPDA(Hydro)-2015/16564-16566 dated 13<sup>th</sup> November, 2015 whereby Determination of the Authority in the Matter of Bulk Supply Tariff for WAPDA Hydroelectric for FY 2015-16 was sent to the Federal Government for notification in the official Gazette.

2. Please find enclosed herewith the subject decision of the Authority (11 pages) in the matter of Motion for Leave for Review filed by WAPDA against Determination of the Authority dated 13<sup>th</sup> November, 2015.
3. The Decision is being intimated to the Federal Government for the purpose of notification in the official gazette pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997).
4. Order of the Authority needs to be notified in the official Gazette.

Enclosure: As above

Secretary  
Ministry of Water & Power  
'A' Block, Pak Secretariat  
Islamabad

  
08.01.16  
( Syed Safer Hussain )

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 MOTION FOR LEAVE FOR  
REVIEW ON THE DETERMINATION OF BULK SUPPLY TARIFF – WAPDA  
HYDROELECTRIC FOR FY 2015-16**

1. WAPDA Hydroelectric (hereinafter referred to as "the Petitioner") vide its letter dated November 20, 2015, filed a motion for leave for review (hereinafter referred to as "Review motion"), seeking review of determination of National Electric Power Regulatory Authority (hereinafter referred to as "the Authority") dated November 11, 2015 in the matter of bulk supply tariff for WAPDA Hydroelectric for financial year 2015-16 (hereinafter referred to as "Impugned determination"). The review motion was filed in terms of rule 16 (6) of the National Electric Power Regulatory Authority Tariff (Standards and Procedure) Rules, 1998 (hereinafter referred to as "tariff rules").
2. The Review Motion was considered and admitted on November 26, 2015 for further proceedings. It was also decided to provide an opportunity of hearing to the parties to the proceedings; accordingly, the hearing in this regard was held on December 10, 2015, for which letters of invitation for participation and submission of comments were sent to the major stakeholders, including the interveners of the proceedings of the impugned determination on December 03, 2015. The hearing was attended by the Petitioner, Mr Azhar Masood Panni (intervener), Mr. Shumail Butt (intervener Government of KPK), Chief Financial Officer (CPPA-G) and others.
3. **Ground for Review Motion:** The petitioner requested for the review of following parameters in its subject review motion;
  - i) O&M expenses
    - a. Employees' Salaries & Benefits
    - b. Repair & Maintenance
    - c. Admin Cost (Survey and Investigation Expenses)
  - ii) Debt : Equity Ratio of Hydro Power Stations
  - iii) Regulatory Asset/Base - Cost of Dam for Diamer Bhasha Dam Project
  - iv) Other Income



v) Regulatory Revenue Gap

4. The submission of the petitioner are as under :-

i. **Operation and Maintenance Expenses:** Under the head of O&M expenses, following costs have been requested for review by the Petitioner.

a. **Employees' Salaries and Benefits**

The Petitioner submitted that while determining tariff for FY 2013-14, NEPRA used the actual salaries and benefits of FY 2011-12 as benchmark and allowed 10% increase per annum. In this way, the Authority did not consider the cost of 550 additional employees hired for three new hydel power projects, i.e. 3 Khawar, Jinnah and Jabban having aggregate capacity of 425 MW, commercialized in phased manner by the petitioner during FY 2011-12 to FY 2013-14. The petitioner further submitted that it has been stated in the determination that employees cost per MW generating capacity of WAPDA is on the higher side, however, no such number has been communicated for comparison. Submitting that, the petitioner requested the Authority to allow this cost as per the audited accounts.

b. **Repair & Maintenance**

The Petitioner submitted that the Authority has benchmarked repair & maintenance cost by fixing it up to maximum of Rs. 1,316 million for FY 2015-16, i.e. no adjustment if actual expenditures exceed the determined limit. The petitioner submitted that incurrence of cost of major repairs depends upon implementation of major maintenance schedules of the power plants as stipulated in the respective power purchase agreements; therefore, it may not be uniform for each year and should be allowed on actual.

c. **Admin cost (Survey and Experiment)**

The petitioner submitted that the Authority acknowledged in the impugned determination that Survey & Investigation expenses are related to regulated



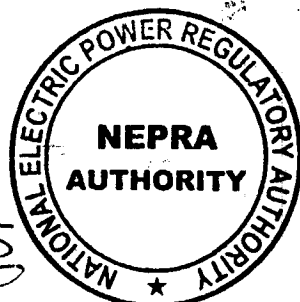
business expenses but observed that these expenses are of development nature. As per IAS 38 such nature expenses are to be expensed out in the year of spending. Survey & Investigation expenses are recurring nature expenses therefore, it may be expensed out in the yearly profit & loss account without having been capitalized. Further, the petitioner submitted the evidence that these expenses are strictly related to power business.

ii. **Debt : Equity Ratio of Hydel Power Stations**

The petitioner submitted that the Authority in the determination has used debt/equity ratio of 70:30 as against WAPDA's claimed ratio of around 20:80 for its in-operation power stations. The petitioner submitted that it financed the capital cost of Ghazi Barotha and other projects before the advent of the Authority at debt/equity ratio of 60:40 as a covenant with the World Bank and other donor agencies, therefore, debt/equity threshold mentioned in the power policy cannot be applied to hydel power stations commenced by WAPDA before the establishment of the Authority and announcement of in vogue hydel Power Policy by the GoP. The petitioner also stated that it had already explained that average tenor of loan repayments of existing hydel power stations is much shorter than the average period of depreciation and no depreciation has been claimed on land cost in accordance with International Accounting Standards, therefore, after repayment of loans of the stations, remaining assets which mostly comprises of civil structures and land is represented as financed through equity. The petitioner also submitted that the Authority uses 70:30 debt/equity ratios while determining tariff at the beginning and not in the middle or at the ending years of the power projects.

iii. **Regulatory Asset Base (RAB) of Projects**

The Petitioner submitted that by referring the examples of apportionment of cost of Tarbela and Mangla Dam projects, the Authority has observed that Diamer Basha Dam (DBD) Project is a multi-purpose dam and has determined that the



cost of dam should be financed by the GoP as grant and may not be recovered from the electricity consumers. The petitioner stated that although DBD Project has larger water storage capacity but water from DBD will purely be discharged for power generation. This regulated release of water from DBD will augment the power generation downstream to the other hydel power projects like Dasu, Pattan, Thakot and Tarbela. The petitioner submitted that it was already replied in response to a query of the Authority that main purpose of construction of reservoir/Dam in DBD project is to create head for power generation and the water from this reservoir/Dam will be released in the river regulated according to the need for power generation and no irrigation channel/ canal is planned up till Tarbela Darn. The regulated releases of water from DBD project will make available steady flows of water for irrigation downstream from Tarbela, this very aspect has been highlighted in the consensus arrived in the meeting of CCI on the matter. The petitioner further stated that in the PC-I of DBD Project duly approved by ECNEC, economic benefits of more regulated water releases have been notionally quantified, however whole of the capital cost is to be recovered through power sale tariff as has been mentioned in the financial analysis of approved PC-I of DBD project. Furthermore, the petitioner submitted that most of the capital cost already incurred on DBD is financed through subordinate loans given by GoP. From the power sale revenue, WAPDA is serving the same at the prescribed terms & conditions. The disallowance of dam cost of DBD for allowing ROA by the Authority will put the Petitioner in difficult situation to service the loans taken to finance the capital cost already incurred. This will also hamper WAPDA's efforts being made to get financing from non-conventional modes as major donor agencies are not interested for providing loans for this very important project for Pakistan.

iv. **Other Income**

The Petitioner submitted that against the proposed other income amount of Rs 431 million, the Authority has deducted Rs. 3,447 million from the revenue requirement of WAPDA Hydroelectric on the pretext that the Authority has



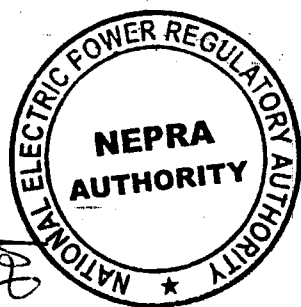
been deducting miscellaneous income previously. The Petitioner submitted that this argument of the Authority does not carry any weight as if something wrong had been done in the past should not be continued. The Petitioner highlighted that other income is not deducted in the tariff determination methodologies adopted by the Authority for Hydel independent power projects. Few items such as scrap sales income, building rental income and miscellaneous services income, the cost of which already included in the determined O&M expenses makes sense for deduction from revenue requirement whereas in the absence of including any margin for meeting financing cost of working capital in the O&M expenses, the deduction of income derived from bank balances and investments is not justified. Similarly, as sinking fund investments and loan reserves have never been included in the working of Regulatory Asset Base (RAB) by NEPRA for allowing ROA in Hydel power sale tariff; therefore, deduction of return thereon from revenue requirement of the Petitioner is not appropriate.

v. **Regulatory Revenue Gap**

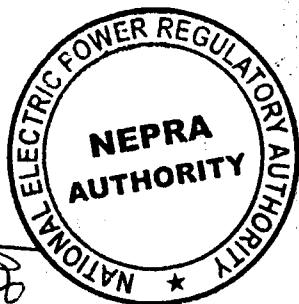
The Petitioner submitted that regulatory revenue gap of Rs. 18,954 million for FY 2011-12 and FY 2012-13; recovery of which allowed to the Petitioner in FY 2014, has been incorrectly deducted from revenue requirement of the FY 2016. During the hearing, the Petitioner admitted that this was a mistake on its part to deduct this revenue gap and requested for rectification.

5. **Submissions of the Interveners**

- i. Mr Masood Azhar Panni submitted that Net Hydel Profit ("NHP") as has been allowed by the Authority to hydel power projects located in KPK should also be allowed to the hydel power projects located either in Punjab or Azad Jammu Kashmir. The Honorable Member (Tariff) explained that NHP has been allowed to KPK as an interim arrangement and all the provinces having hydel power projects were directed to approach the relevant forum in this regard.

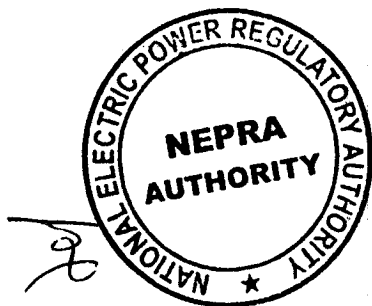


- ii. Mr Shumail Butt stated that as per the Authority's legislation, the grounds as submitted by the Petitioner does not warrant any review as all the submissions had already been considered by the Authority in the impugned determination. Mr. Butt supported Authority's position on apportionment of cost DBD and submitted that there is no doubt that DBD is of high national importance, but the whole cost thereof cannot be parked only to electricity tariff. Mr. Shumail Butt also opposed the Petitioner's requests for allowing the operation and maintenance expenses on the basis of the audited accounts.
- iii. Chief Financial Officer, Central Power Purchasing Agency Guarantee (CPPA-G) supported the stance of the Petitioner for removing the cap from the head of repairs and maintenance. He also submitted that the debt : equity ratio as used by the Authority for the Petitioner's hydel power stations is appropriate as the same should be allowed as per the industry standards. Further, he submitted that other income should be deducted from the revenue requirement of the Petitioner.
6. Argument heard and record perused.
7. 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".
8. 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 determination. The Authority is of the view that only the following grounds merit consideration and certain clarifications:-



- Repair & Maintenance
- Survey and Investigation Cost
- Regulatory Asset Base of Projects
- Other Income
- Regulatory Revenue Gap

- iv. **Repair & Maintenance:** The Authority noted that there are old power plants in the fleet of the Petitioner which require constant repair and maintenance. The Authority in past allow R&M cost on actual basis and therefore agrees with the pray of the petitioner to remove the cap on R&M cost allowed to the petitioner.
- v. **Survey and Investigation Cost:** The Authority noted the Petitioner has submitted the necessary documents that substantiate that these costs are strictly related to power business and should be expensed out on yearly basis. Hence, the Authority has decided to allow Rs. 502 million for FY 2015 and Rs. 552 million for FY 2016 on this account, subject to adjustment on actual in the next tariff petition.
- vi. **Regulatory Asset Base (RAB) of Projects:** Regarding the request of the Petitioner for non-apportionment of cost of DBD into power and water business, the Authority is of the view that DBD is a multi-purpose project and parking the total cost of the project into power sector is not justified. However, it is clarified that the percentages that have been used for apportionment are provisional which may be reconsidered in future on the basis of relevant documents to be submitted by the Petitioner in the next tariff petition.
- vii. **Other Income:** The Petitioner arguments related to exclusion of Other Income from financial asset amounting to Rs 2.446 billion was considered and it was noted that income from financial assets which comprises of Rs 2.1 billion on account of profit on bank balance and Rs 346 million on account of interest income on investment, is earned on the un spent/un utilized balance of loans in FY 2015. It was also noted that the unspent loan carries a cost which according

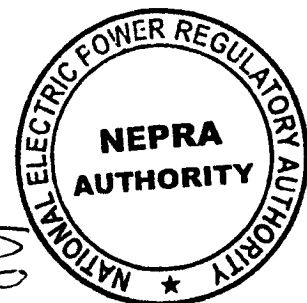




to audited accounts for FY 2015, amounts to Rs 2.906 billion which was not included in the revenue requirement of the Petitioner. It was further observed that the unspent loan amounting to Rs 34.667 billion have not been included in the approved Regulatory Asset Base (RAB) because of the fact that the current model of revenue requirement only allow WACC based return on what is spent for a particular year based on the actual audited accounts. The Authority realizes that either both the cost and the income should be included in the Petitioner's revenue requirement or the impact of both should be excluded in the revenue requirement. Deducting income while disregarding the associated cost, which is more than the income by about Rs 460 million (Rs 2.906 billion - Rs 2.446 billion) may not be a right approach. In view thereof, the Authority has decided not to deduct other income on financial assets amounting to Rs. 2.446 billion for the FY 2015 and FY 2016. However, the Authority hereby directs the petitioner to utilize the borrowed funds to the fullest and in future, if such funds, that have been given to the petitioner for timely execution of nationally important hydroelectric power projects remained unutilized due to Petitioner's incompetence, then no such adjustment as allowed above shall be given to the Petitioner.

- viii. **Regulatory Revenue Gap:** The Authority noted that there was an error in the tariff petition filed for the determination of tariff for the FY 2016. The Authority examined the workings submitted by the Petitioner and noted that the revenue gap for the FY 2012 and FY 2013 of around Rs. 18.9 billion was allowed to be recovered in the FY 2014 after which the tariff impact of that gap was required to be removed. Therefore, the Authority decided to remove the impact of this anomaly in the petitioner's tariff which inadvertently was included in the petitioner's tariff for the FY 2016.

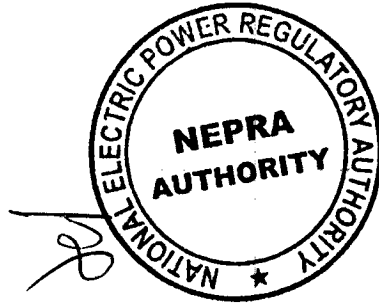
- ix. On the basis of aforementioned the following modified tariff has been approved for the Petitioner:



| Regular Tariff               | Rs/kWh             | Applicability (FY 2016)                       |
|------------------------------|--------------------|---|
| <b>Hydel related charges</b> |                    |   |
| IRSA Charges                 | 0.0050             | Total of generation of WAPDA<br>Hydroelectric |
| NHP                          | 1.1000             | Generation of power plant located in KPK      |
| Water Use Charge             | 0.1500             | Mangla's generation                           |
| Variable Cost                | 0.0903             | Total generation                              |
|                              | <b>Rs/kW/Month</b> |   |
| Fixed charges                | 657.4146           | Total generation capacity                     |

**Recovery Of Revenue  
Gap**

|                  |             |          |
|------------------|-------------|----------|
| Fixed Charges    | Rs/kW/Month | 134.5769 |
| Variable Charges | Ps /kWh     | 1.848    |



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**Order**

1. Subject to adjustment on account of determination of net hydel profits, WAPDA Hydroelectric (Petitioner) is allowed to charge the Central Power Purchasing Agency Guarantee Limited (CPPA-G) the two part tariff, for sale of bulk power measured at the bus bar of its hydroelectric power stations connected directly or indirectly to the transmission system of NTDC.

| <b>Regular Tariff</b>          | <b>Rs/kWh</b>      | <b>Applicability (FY 2016)</b>             |
|--------------------------------|--------------------|--|
| <b>Hydel related charges</b>   |                    |  |
| IRSA Charges                   | 0.0050             | Total of generation of WAPDA Hydroelectric |
| NHP                            | 1.1000             | Generation of power plant located in KPK   |
| Water Use Charge               | 0.1500             | Mangla's generation                        |
| <b>Variable Cost</b>           | 0.0903             | Total generation                           |
|                                | <b>Rs/kW/Month</b> |  |
| <b>Fixed Charges</b>           | 657.4146           | Total generation capacity                  |
| <b>Recovery Of Revenue Gap</b> |                    |  |
| Fixed Charges                  | <b>Rs/kW/Month</b> | 134.5769                                   |
| Variable Charges               | <b>Ps /kWh</b>     | 1.848                                      |

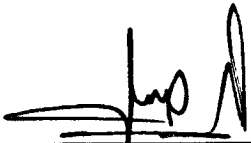
2. The above tariff i.e. Regular Tariff and Recovery of Revenue Gap, is applicable for a period of one year from date of its notification by GoP, after which the regular tariff as indicated above will be effective and the tariff to recover the revenue will cease to exist.
3. Any over/under recovery of cost/revenue requirement due to factors beyond control of the Petitioner will be adjusted, after due consideration by the Authority, at the time of next tariff determination.

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4. The order is to be intimated to the Federal Government for notification in the official gazette under section 31 (4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.

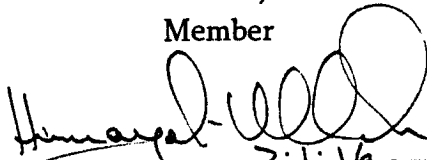
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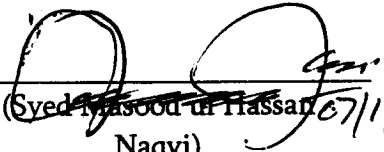
(Khawaja Muhammad  
Naeem)  
Member

on tour

(Maj. (R) Haroon Rashid)  
Member

  
2.1.16

(Himayat Ullah Khan)  
Member

  
07/1/16

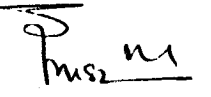
(Syed Masood ul Hassan  
Naqvi)  
Member



(Brig. (R) Tariq Saddozai)  
Chairman

7/1/16



  
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