



Registrar

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

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No. NEPRA/TRF-312/WAPDA (Hydro)-2015/16564-16566  
November 13, 2015

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

Dear Sir,

Please find enclosed the subject Determination of the Authority (31 pages) in Case No. NEPRA/TRF-312/WAPDA(Hydro)-2015.

2. The Determination 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) and Rule 16(11) of the National Electric Power Regulatory Authority Tariff (Standards and Procedure) Rules, 1998.
3. Order of the Authority's Determination needs to be notified in the official gazette.

Enclosure: As above

  
13.11.15  
( Syed Safer Hussain )

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

CC:

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

National Electric Power Regulatory Authority  
(NEPRA)

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**Determination of the Authority**

In the matter of Bulk Supply Tariff  
for WAPDA Hydroelectric  
Financial Year 2015-16

November...13.....2015

**Interveners:**

- M/S Anwar Kamal Law Associates (AKLA)
- Mr. Azhar Masud Panni
- Govt. of Khyber Pakhtunkhwa

**Commentator:**

- Board of Investment (BOI) Govt. of Pakistan



**Background**

- 1) WAPDA Hydroelectric (hereinafter referred as "the Petitioner") has filed a petition for determination of Bulk Supply tariff for FY 2015-16 for sale of power to NTDC/CPPA, pursuant to NEPRA Tariff Standards and Procedure) Rules, 1998 (Tariff Rules). The salient features of the petition are as under:-
- 2) The projected change in the revenue requirement for FY 2015-16 has been worked out on the basis of:
  - Audited statement of FY 2013-14,
  - Actual Number for six (6) months (Jul Dec) for FY 2014-15,
  - Projected numbers for last six months (Jan-Jun) of FY 2014-15
  - Full projections for FY 2015-16
- 3) Following comparison of the component wise claimed and allowed revenues requirement;

Annual Revenue Requirement	Requested 2016 Rs in million	Determined 2014 Rs in million
O&M Expenses (Variable Portion)	1,222	8,591
O&M Expenses (Fixed Portion)	11,527	
Depreciation	5,750	5,182
Ijara Rental	3,574	1,506
Net Hydel Profit/Water Usage Charge	34,927	6,742
IRSA Charges	159	159
Return on Investment on Hydel Power Stations	31,131	
Return on Investment on Hydel Power Projects	22,906	34,034
Other Income	(431)	(1049)
<b>Total</b>	<b>110,765</b>	<b>55,165</b>
Regulatory Revenue Gap FY 2013-14	9,192	-
Regulatory Revenue Gap FY 2014-15	2,165	-
<b>Total</b>	<b>122,121</b>	<b>55,165</b>



- 4) Breakup of requested vs. current applicable tariff is reproduced hereunder:

		Proposed Tariff 2015-16	Present Tariff Effective 27-02-15	Change Incr/(Decr)
Revenue from power sales	[Million.Rs]	122,121	55,165	66,956
<b>Break-up of power sale revenue</b>				
Fixed Portion of Revenue	[Million.Rs]	120,899	52,407	68,492
Variable Portion of Revenue	[Million.Rs]	1,222	2,758	(1,536)
Installed Capacity	[MW]	6,902	6,902	-



*Determination of bulk supply tariff for  
WAPDA Hydroelectric  
Financial Year 2015-16*

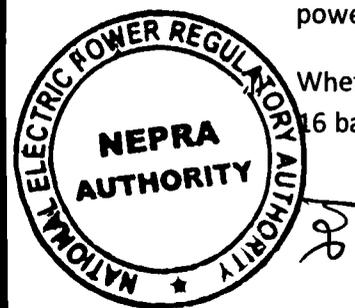
		Proposed Tariff 2015-16	Present Tariff Effective 27-02-15	Change Incr/(Decr)
Net Electrical Output	[GWh]	31,752	31,752	-
<b>Tariff</b>				
Fixed Charge	[Rs/kW/M]	1,459.62	632.7887	826.84
Variable Charge	[Ps/kWh]	3.85	8.6869	(4.84)
<b>Average tariff</b>	<b>[Rs/kWh]</b>	<b>3.85</b>	<b>4.74</b>	<b>0.89</b>

- 5) The petition was admitted on May 26, 2015 and in term of Rules 4(5) of Tariff Rules, notices of admission were sent to stake holders. The brief description and salient features of the petition were also published in the national newspaper on June 20, 2015 seeking filing of reply, comments or intervention requests within 7 days of the date of publication. A date of July 30, 2015 was also fixed for hearing for which notice of hearing was published on July 10, 2015. However, the hearing was postponed; for which notice was published in the daily newspapers on July 29, 2015 along with intimation to concerned parties through separate notices of postponement. In the same notice, it was also decided to extend the deadline for submission of comments/intervention requested till August 08, 2015. Later on, the hearing was scheduled for September 08, 2015 and due notices were published in the daily newspapers; beside separate notices were also sent to the concerned parties on August 26, 2015.
- 6) In response to the published notices, M/S Anwar Kamal Law Associate (AKLA), Mr Masood Panni and Government of Khyber Pakhtunkhwa filed intervention requests. In addition to that Board of Investment (BoI) Govt. Of Pakistan filed comments. The intervention requests were forwarded to the Petitioner for its reply on the issues so raised and the Petitioner's reply in the matter was also shared with the interveners.
- 7) It is to be noted that Government of KPK (Govt KPK) submitted its intervention request after the deadline of August 10, 2015 set by the Authority. However, the Authority subsequently condoned the delay and approved the intervention of the Govt of KPK for proceedings.
- 8) Mr Panni in its intervention requested that NHP rate @ Rs1.10/kWh should not be allowed until approved by CCI. He suggested that Water Use Charge (WUC) as stated in 2002 power policy should be adopted uniformly for all hydel stations of the petitioner and that NHP/WUC of all the petitioner's stations should be proportionately distributed among provinces where these stations are situated.
- 9) In response, the petitioner argued that it revised the NHP calculation based on the directions of CF-Wing, Finance Division vide letter dated 16th March, 2013 regarding un-capping the rate of NHP and advice of Minister of Water & Power, NHP at the rate of Rs.1.10 per kWh for all hydel power stations payable to respective Provinces and territories, has been proposed. With regards to the issue of WUC, the Petitioner stated that it involves policy decision by GoP the Petitioner being public sector entity follow the directions of Federal Government.
- 10) Govt. of KPK agreed with the petitioner's NHP applied rate of Rs1.10/kWh and stated that it should be effective from 01.07.2013 with 5.5% annual indexation as an interim arrangement.



- 11) M/S Anwar Kamal Law Associate (AKLA) submitted in its intervention request that the Petitioner's tariff should be separately determined for each generating unit. He further argued Capital Work In Progress (CWIP) should not be a part of RAB and WAPDA tariff should be determined for longer period of time.
- 12) The Petitioner responded to AKLA submissions and stated its Generation License is of installed capacity of 17359.96 MW which contains 9,602 MW for 19 Hydel Power Stations in operation and 7,757.96 MW for 5 under construction Hydel Power Projects. Therefore, bulk supply tariff is worked out for aggregated installed capacity in operation while Hydel power station wise calculation of each component of revenue requirement and calculation of power station wise tariff is appended to the tariff petition. With regards inclusion of CWIP in the RAB, the Petitioner responded that NEPRA also allows return on equity during construction to hydro power project being established in the private sector.
- 13) Board of Investment (BoI) Government of Pakistan offer a generic comment that tariff should be consumer friendly & competitive with neighbouring countries therefore, the Petitioner's reply was not sought.
- 14) The Following issues were framed for the proceedings:
  - a) Whether the O&M cost of Rs. 12,750 million requested by the Petitioner for FY 2015-16 is justified?
  - b) Whether the proposed depreciation charge and Ijara rental for FY 2015 amounting to Rs. 3,574 million is justified?
  - c) Whether constitutional obligation of the Petitioner to pay Net hydel profit to the Provinces has been fully taken care of and;
  - d) Whether the requested Net Hydel Profit (NHP) amount of Rs. 18,810 million for Government of Khyber Pakhtunkhwa (against Rs 6,000 million allowed), Rs 9,526 million Government of Punjab (against none previously allowed) and Rs 6,591 million for Government of AJK (against none previously allowed) is justified?
  - e) Whether the Petitioner's claim of total Regulatory asset base amounting to Rs 381,506 million is justified?
  - f) Whether the proposed WACC of 16.374% is justified?
  - g) Whether the debt equity ratio of 18:82 for hydel power station and 81:19 for hydel power projects is justified?
  - h) Whether the proposed Other Income of Rs. 431 million for FY 2015-16 is justified?
  - i) Whether or not separate tariffs should be determined for each of the Petitioner's current power stations and upcoming power projects?

Whether annual estimated production of 31,752 GWh each for FY 2014-15 and for FY 2015-16 based on existing as well as incoming hydropower stations is justified?





k) Whether Petitioner's request for adjustment of Rs 9,192 million for FY 2013-14 and Rs2, 165 million for FY 2014-15 on account of Regulatory Revenue Gap is justified?

15) The Chief Minister Government of KPK, Minister of Energy Government of KPK, ex MNA Mr Humayun Saifullah, Nighat Orakzai, and Members Parliament including section of Media participated in the hearing. The Petitioner represented by Mr Anwarul Haq, General Manager (Finance)/Acting Member Finance presented the case for revision in the applicable tariff from the Rs 1.74/kWh to Rs 3.85/kWh. Mr Panni an intervener presented the grounds of its intervention, which pertained to net Hydel Profit in the light of the provisions of 1973 constitution. The government of KPK was represented by Mr Shumail Butt. Mr Shumail Butt focused on the issue of NHP giving an overview of the decisions/agreements at different forums in the past. The government of KPK raised its serious concerns with respect to equating the Water Use Charge to Net Hydel Profit and argued that these two are distinct provisions and should be treated separately. The Government of KPK was in favour of uncapping the NHP from current Rs 6 billion to Rs 1.10/kWh and requested the Authority to include the revised rate as an interim measure till this dispute is settled with the federal government at competent forum.

16) Having considered the submission of the Petitioner, comments of the interveners and commentator, the issue-wise finding of the Authority is given in the following paragraphs.

### Whether the claimed O&M expense is justified?

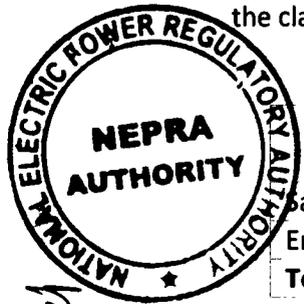
17) The Petitioner provided following main heads of O&M expenses:

Component of Revenue Requirement	Projected FY 2015-16	Projected for FY 2014-15	Audited for FY 2013-14	(Million in Rs.)
				Determined for FY 2013-14
Employee's salaries & benefits	4,100	3,586	2,979	2,666
Postretirement benefits	4,193	3,811	3,832	1,950
Repair & Maintenance (Fixed)	405	368	382	2,528
Repair & Maintenance (Variable)	1,222	1,111	990	
Administrative expenses	2,830	2,545	2,310	1,447
<b>Total</b>	<b>12,750</b>	<b>11,421</b>	<b>10,493</b>	<b>8,591</b>

18) **Employee's Salaries & Benefits:** Following information has been submitted by the Petitioner for the claim on this account;

Heads	Million Rs		
	2015-16 Projected	2014-15 Projected	2013-14 Audited
Salaries and Wages	3,604	3,135	2,569
Employee Benefits	496	451	410
<b>Total</b>	<b>4,100</b>	<b>3,586</b>	<b>2,979</b>

19) The Authority noted that for projecting the expenses of employees' salaries and wages for financial years 2015 and 2016, the Petitioner has increased the audited expenses for the year 2013-14 by 10% due to adhoc relief allowed by GoP as well as 15% for the annual increments.



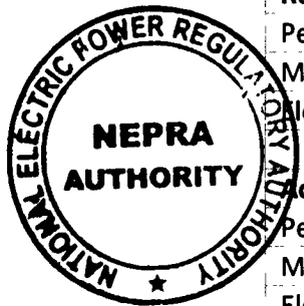


Moreover, the Petitioner submitted that an increase of 10% in employee benefits (mainly comprising of free electricity charges to the current employees) on a year to year basis has been claimed to match the inflation. In addition to that, the Petitioner submitted that cost of additional 550 employees for the operation and maintenance of newly commissioned power stations of WAPDA has also been taken into account. Subsequently, the Petitioner submitted an unsigned copy of the annual accounts for the FY 2015, as per which the actual cost in the corresponding year comes out to Rs. 3,520 million.

20) The Authority noted that the Petitioner's claim for salaries, wages and benefits is on the higher side. The Authority considers that since no new capacity is added in the system, therefore, there is no justification for increase in salaries and wages on account of additional employees. In view thereof, the Authority considers that only the impact of annual increments inflation, and relief announced by GoP needs to be considered. Accordingly, the Authority after due consideration decided to maintain the employee related cost of Rs. 2,666 million as allowed for FY 2014. Thereafter, keeping into consideration the increase in pay and keeping the ratio of the number of employees to installed capacity as constant, the Authority assessed Rs. 2,918 million and Rs. 3,188 million for the financial year 2014-15 and financial year 2015-16 respectively.

21) **Post-Retirement Benefits:** Following information was submitted by the Petitioner for the claim on this account;

Post-Retirement Benefits	Million Rs.		
	2015-16 Budgeted	2014-15 Provisional	2013-14 Audited
<b>Retired Employees</b>			
Pension	1,342	1,219	1,271
Medical	325	295	265
Electricity	185	169	169
<b>Total</b>	<b>1,852</b>	<b>1,683</b>	<b>1,705</b>
<b>Active Employees</b>			
Pension	1,487	1,351	1,410
Medical	655	596	535
Electricity	199	181	182
<b>Total</b>	<b>2,341</b>	<b>2,129</b>	<b>2,127</b>
<b>Grand Total</b>	<b>4,193</b>	<b>3,812</b>	<b>3,832</b>



22) The Authority in its last determination for WAPDA Hydroelectric for FY 2013-14, the Authority had decided that till such time the issue of the pensioners and payment obligations of each ex-WAPDA companies is resolved and actuarial valuation study is submitted to the Authority for approval, the Petitioner will be allowed the cost of post-retirement benefits on actual payment basis. Accordingly the petitioner was allowed Rs. 1,950 million for the financial year 2014 subject to adjustment on actual.

23) In the subject petition, the Petitioner has submitted that the Authority vide its determination for Faisalabad Electric Supply Company ("FESCO") dated March 10, 2015 has principally decided that all cost of XWAPDA retired employees up to June 30, 2014 would be borne by WAPDA, however, any cost after June 30, 2014 would be borne by respective

*[Handwritten signature]*



corporate entities and directed to submit next petitions accordingly. Based on the referred decision, the Petitioner requested the Authority to allow it to recover Employee Retiring Benefits as per Actuarial Valuation based upon PUC Cost method for the retired as well as active/serving employees in line with IAS-19.

24) In view of the discussions in the preceding paragraphs, the Authority considers that the claim of the Petitioner to allow this cost both for retired and serving employees is justified and therefore, decided to allow the same. For the FY 2014 and 2015, the audited figures have been used and for the FY 2016, an increase of 10% over 2015 expenses, subject to actual, has been allowed. Accordingly, the Authority has decided to allow Rs 3,832 million 3,812 million & Rs 4,193 million for the FY 2014, FY 2015 & FY 2016 respectively on account of post-retirement benefits.

25) **Repair & Maintenance:** Following information was submitted by the Petitioner for its claim on this account;

Repair and Maintenance	Million Rs.		
	2015-16 Projected	2014-15 Projected	2013-14 Audited
<b>Variable Portion</b>			
Fuel Charges	26	23	21
Repair & Maintenance	1,197	1,088	969
<b>Total</b>	<b>1,222</b>	<b>1,111</b>	<b>990</b>
<b>Fixed Portion</b>			
Insurance	55	50	50
Consultancy	350	318	332
<b>Total</b>	<b>405</b>	<b>368</b>	<b>382</b>
<b>Grand Total</b>	<b>1,627</b>	<b>1,479</b>	<b>1,372</b>



26) In the last determination for WAPDA Hydroelectric for the FY 2014, the Authority allowed the requested amount of Rs. 2,528 million on account of repair and maintenance, however, the actual expenditures on this account remained Rs. 1,372 million (reconciled with audited accounts). The Petitioner submitted that replacement and refurbishment activities planned during FY 2013-14 for hydel power station Tarbela could not be performed due to lengthy tendering process of International Competitive Bidding (ICB), longer supply periods for the parts/equipment, change in schedules of maintenance etc. which are expected to be completed in FY 2015 and 2016. Later, the Petitioner submitted an unsigned copy of the annual account for the FY 2015, as per which the cost for the corresponding year on this account is indicated as Rs. 1,196 million

27) While allowing repair & maintenance costs for the financial year 2013-14 with the adjustment on actual basis for all future claims, the Authority directed the Petitioner to include complete plant wise details of repair and maintenance costs claimed. The petitioner was further directed to submit plant wise history of actual repair and maintenance costs for the preceding five years with the copies of internal approvals and details of internal procedures followed for approval of its repair and maintenance costs, along with the tariff petition. The details of plant-wise repair



and maintenance costs for last five years along with a sheet stating the procedure followed for approval has been submitted by the Petitioner.

- 28) Having gone through the information and record produced before the Authority, the audited amount for the FY 2014 and the amount as indicated in the unsigned audited account for FY 2015 has been allowed to the petitioner on account of repair & maintenance expense. For FY 2016, an increase of 10% over the last year is allowed as a maximum ceiling. The adjustment shall be made on actual basis in case the actual expenses are lower than the allowed ones, however, no adjustment shall be made if it exceeds the allowed limit.

Head	Million Rs.		
	2015-16	2014-15	2013-14
Repair & Maintenance	1,316	1,196	1,372

- 29) **Admin Expenses:** The Petitioner requested Rs. 2,831 million on account of admin expenses. In support of this request, the following information has been provided:

Heads	2015-16 Projected	2014-15 Projected	2013-14 Audited
Survey and Experiment	551	510	502
Dams and Hydrology Monitoring	620	553	503
Power, Gas and Water	330	294	268
Management/Authority Overheads	610	545	496
Vehicle Running Expenses	292	261	237
NEPRA Fees	146	130	76
Other Admin Expense	283	252	229
<b>Grand Total</b>	<b>2,831</b>	<b>2,546</b>	<b>2,311</b>



- 30) While justifying the claim of survey and experiment account, the Petitioner submitted that for the identification of viable project sites from the immense potential, WAPDA has established a hydro planning division which carries out surveys and investigations on a regular basis. Moreover, WAPDA has also established certain centres to generate hydrology data which become the basis for planning a hydel power project. The Petitioner submitted that the cost on the account used to be financed by GOP through allocations in PSDP, however, that allocation has been reduced considerably. The Petitioner feels that it is imperative to maintain this department for which tabulated above cost has been claimed. For the rest of the items, the Petitioner submitted that claimed expenses have been given the relevant indexations for FY 2015 and 2016 over 2014. The Petitioner request was examined in the light of Authority's assessment in the previous years and the actual trends. The Authority agrees that in order to carry out development activities such costs are required. The Authority considers that the aforementioned costs are developmental in nature. Moreover, some costs pertain to water projects and the petitioner has not segregated the costs pertaining to the power projects. Since these costs are developmental in nature; therefore these cannot be considered under the normal admin head.

- 31) In the light of discussion in the preceding paras the Authority considers that the administrative expenses are mostly local expenses and can be controlled with efficient operations, therefore,



instead of allowing actual expenses, allowing certain indexation as being done in the past is a right practice. In view thereof, following O&M costs based on a 10 % increase on year to basis has been assessed.

Head	Million Rs.		
	2015-16	2014-15	2013-14
Admin Cost	1,751	1,592	1,447

32) Recapitulating all the above discussion in respect of the operation and maintenance cost, the following has been assessed;

Component of Revenue Requirement	Million Rs.		
	2015-16	FY 2014-15	FY 2013-14
Employee's salaries & benefits	3,188	2,918	2,666
Postretirement benefits	4,193	3,812	3,832
Repair & Maintenance (Total)	1,316	1,196	1,372
Administrative expenses	1,751	1,592	1,447
<b>Total</b>	<b>10,447</b>	<b>9,518</b>	<b>9,317</b>



Whether the proposed depreciation charge and Ijara rental for FY 2015 amounting to Rs. 3,574 million is justified?

33) Following information was submitted by the Petitioner for the claim on this account;

Description	Million Rs.		
	2015-16 Projected	2014-15 Projected	2013-14 Audited
Depreciation as per fixed assets schedule	8,048	8,041	7,808
Less: Difference due to Revaluation	(2,298)	(2,453)	(2,852)
<b>Net Depreciation for RAB</b>	<b>5,750</b>	<b>5,588</b>	<b>4,956</b>

34) The Petitioner submitted that the proposed depreciation charge is based on historical/ purchase cost of fixed assets. Further, the Petitioner submitted that depreciation for FY 2013-14 remained in the same vicinity as was in FY 2013 because of reduction in assets (sale of assets of Tarbela Hydel Power Station to SUKUK Company). However, there was an increase due to completion of Duber Khwar, Jinnah and Jabban hydel power projects.

35) The stated figure for the financial year 2014 is in accordance with audited accounts therefore allowed as such. However, as per the unsigned copy of the FY 2015 annual accounts submitted later, the actual depreciation charge was Rs. 5,090 million against RS 5,588 million assumed by the Petitioner. The Authority has gone through the claims of the Petitioner and decided to allow the following depreciation expense as per the audited account of FY 2014 and unsigned audited account of FY 2015. For FY 2016, a reasonable increase is allowed on account of increase in depreciation for the FY 2016 due to completion of some of the petitioner's ongoing projects which will be adjusted on actual:



Head	2015-16	2014-15	2013-14
Depreciation (Rs in million)	5,599	5,090	4,956

36) Ijara Rentals: Following information was submitted by the Petitioner for the claim on this account;



Description	Million Rs.		
	2015-16 Projected	2014-15 Projected	2013-14 Audited
Ijara Rental (Sukuk-II)	1,506	1,502	1,502
Ijara Rental (Sukuk-III)	2,068	2,068	825
Net Depreciation for RAB	3,574	3,570	2,327

37) The Petitioner submitted that SUKUK-II and SUKUK-III during the financial years 2014, 2015 and 2016 pertaining to the Tarbela hydel power station has been taken as per Ijara Rental Agreement. The cost on this account for the financial year 2014 has been evaluated on the basis of audited accounts and found correct. Moreover, the cost on this account for FY 2015 as per the unsigned annual account for the corresponding year comes out to be Rs. 3,401 million against Rs 3,570 million requested. Since, these expenses have been paid under the agreements, therefore, for FY 2014 and FY 2015, Rs 2,327 million and Rs 3,401 million respectively has been allowed. For FY 2016 an amount of Rs 3,574 million is allowed as reasonable estimate which will be subject to adjustment at actual in the next tariff determination.

- Whether constitutional obligation of the Petitioner to pay Net hydel profit to the Provinces has been fully taken care of and
- Whether the requested Net Hydel Profit (NHP) amount of Rs. 18,810 million for Government of Khyber Pakhtunkhwa (against Rs 6,000 million allowed), Rs 9,526 million Government of Punjab (against none previously allowed) and Rs 6,591 million for Government of AJK (against none previously allowed) is justified?

38) The Petitioner informed that upon the directions of GOP, it has been making ad-hoc payment of Rs.6, 000 million annually as an interim arrangement to the Government of KPK whereas no payment has been made to Government of Punjab. In addition to Net Hydel Profit, the Petitioner is also making payment of Water Usage Charges (WUC) to the Govt AJ&K under MOU/ Agreement dated 27.06.2003, at the rate of Rs.0.15 per kWh on generation at Mangla Hydel power station. For tariff calculation the Petitioner has assumed Payment of NHP and WUC at the same level and in the same manner for FY 2013-14 & FY 2014-15.

39) The Petitioner further informed that as per Finance Division (CF Wing) Government of Pakistan vide letter No.F.1(11)CP-I/2011- 12/398 dated 16th March, 2013 has forwarded the minutes of meeting dated 14th March, 2013 held under the chairmanship of Finance Minister on the NHP issues raised by Khyber Pakhtunkhwa, which states that in response to the demand of Khyber



Pakhtunkhwa regarding un-capping the rate of NHP, it is decided that rate of NHP shall be Rs.1.10 per kWh to be approved w.e.f next financial year.

- 40) In another meeting chaired by Minister of Water & Power, the Petitioner was advised to incorporate NHP/WUC @ Rs 1.10 per kWh for all Hydel Power Stations payable to respective Provinces & AJK. Accordingly, based upon estimated Net Electrical Output (NEO) of all the Hydel power stations operated by WAPDA Hydroelectric, the NHP/WUC of Rs.34, 927 Min for FY 2015-16 as projected by the Petitioner is indicated below.

Province	2015-16			2014-15			2013-14		
	Generation	Rate	Amount	Generation	Rate	Amount	Generation	Rate	Amount
	(GWh)	(Rs/kWh)	(Mn Rs)	(GWh)	(Rs/kWh)	(Mn Rs)	(GWh)	(Rs/kWh)	(Mn Rs)
Payable to:									
Govt. of KPK	17,100	1.10	18,810	17,100		6,000	17,168	-	6,000
Govt. of Punjab	8,660	1.10	9,526	8,660		-	8,413	-	-
Govt. of AJ&K	5,992	1.10	6,591	5,992	0.15	899	5,725	0.15	859
<b>Total</b>									

#### Intervener – Mr Azhar Masud Panni’s Submission

- 41) According to one of the intervener Mr Panni the major reason for 221% increase in Avg. Tariff is the increase in Net Hydel Profit/Water Use Charge (NHP/WUC) from Rs. 6,742 to Rs. 34,927 Million for FY 2015-16, which amounts to 518% increase, the largest jump among all factors from 2013-14 to 2015-16.
- 42) Mr. Panni objected to the request for increase in NHP/WUC being in contradiction to Clause 161(2) of the Constitution of Pakistan, 1973 which provides for determination of price of bulk supply of energy at the bus-bar of hydroelectric power stations by the Council of Common Interests (CCI) and deducting there from all operating expenses of the power stations to calculate the hydel profit for the provinces where hydel power stations are located. In Mr Panni’s opinion only NEPRA has the mandate and capacity to fix and suggest this profit to CCI for payment as NHP/WUC to the respective provinces/entities keeping in consideration interest of all stake holders of which impact on national economy is the most important.
- 43) Mr. Panni stated that Government of Pakistan has determined a pre-fixed amount of hydel profit as “Water Use Charge” (WUC) in Para 76 of the "Policy for Power Generation Projects - 2002" issued by PPIB which has recently been revised around Rs 0.45/KWh in 2015. In presence of GoP’s own guidelines, Mr Panni argued that no government functionary on its own can arbitrarily decide to pay Rs. 1.10/KWh as NHP to respective provinces as mentioned in Para 3 above which has been incorporated in WAPDA Hydroelectric Tariff Revision Petition for FY 2015-16.
- 44) Mr Panni also pointed out that two power stations i.e. Gomal Zam and Warsak are not in Khyber Pakhtunkhwa (KPK). In fact they are in FATA which has been wrongly included by the Petitioner in KPK. Therefore any amount of NHP/WUC finally determined by NEPRA and approved by CCI has to be distributed between KPK and FATA proportionately.





- 45) Mr Panni prayed to the Authority that on the basis of above explanation,
- WAPDA Hydroelectric should not be allowed, in its petition for revision of tariff for Bulk Supply of Power for FY 2015-16, any increase in Net Hydel Profit (NHP) from Rs. 6 billion until approved by CCI in line with Article 161(2) of the Constitution of Pakistan 1973.
  - Water Use Charge (WUC) in "Policy for Power Generation Projects - 2002", as revised recently by PPIB, should be adopted uniformly for all hydel power stations of WAPDA Hydroelectric in the same way as being done for PEDO, PPDB, HEB AJ&K and IPPs hydel plants for payment of hydel profit.
  - NHP/WUC of 19 operational WAPDA Hydroelectric power stations should be distributed among all provinces and territories proportionately where these power stations are physically located.

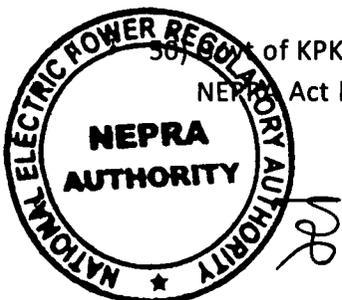
**Petitioner's Response to Mr Panni's Intervention**

- 46) Responding to the intervener's objections with respect to NHP, the Petitioner stated the NHP issues involves policy decision by GOP. WAPDA being public sector entity follows the directions of Federal Government. From WAPDA Hydroelectric perspective, we believe that CCI is the right forum to determine NHP/WUC rate as explained in the Constitution of Pakistan.

**Intervention – Government of Khyber Pakhtunkhwa (KPK)**

- 47) While responding to the Mr. Panni's objections the Government of Khyber Pakhtunkhwa stated that it has left no stone unturned to give effect to the decision of the Technical Sub-Committee circulated vide Letter of the Finance Division dated 16.03.2013. It has virtually run from pillar to post to get this decision implemented w.e.f. 01.07.2012 but it was sheer obduracy on part of WAPDA that resulted in further procrastinating the matter and a federating unit was unduly denied its constitutional right.
- 48) Govt of KPK pointed out that the rate of Rs. 1.10 per KWh was to take effect on 01.07.2013 and was to be annually indexed by 5.5%. The rate of NHP for FY2015-16 thus comes to Rs. 1.22 per KWh. The Province therefore requested readjustment in the proposed tariff accordingly. In its opinion the decision should be given effect from FY2013-14 and the arrears and differential should be worked out in terms of letter of Finance Division dated 16.03.2013 and be included in the tariff of WAPDA as Past year adjustments
- 49) The Govt of KPK reiterated that Article 161(2) of the Constitution is the governing law in so far as the determination of Net Hydel Profit (NHP) is concerned. The Council of Common Interest (CCI) approved the AGN Kazi Formula for determination of NHP which has been agreed to by the Federation and all the Provinces in forum of CCI and was later reaffirmed by subsequent CCIs and Supreme Court of Pakistan. Based on this decision of CCI, the GOKPK has a certain claim of NHP which has been duly adjudicated by an arbitral tribunal constituted for the purpose between the Federal Government, WAPDA, and Province of KP. This claim continues to be affirmed and reiterated by the GOKPK.

Govt of KPK further submitted that NEPRA Authority pursuant to Section 7, 31 and 45 of the NEPRA Act has the exclusive jurisdiction and mandate to determine terms and conditions of



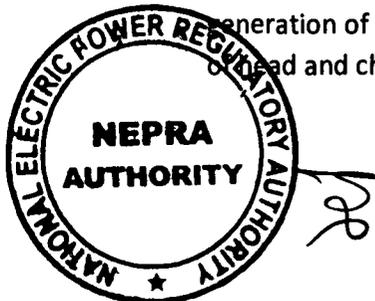


the tariff. Hence, it is submitted that the Authority implements the decision of NHP as approved by the CCI in letter and spirit.

- 51) Notwithstanding and without prejudice to the aforesaid, the GOKPK supports the tariff petition of WAPDA as an interim arrangement, for the partial payment of NHP during the FY 2015-16. According to Govt of KPK if any of the stakeholder has any opposition to agreed arrangement dated 16.03.2013, this Province reserves its rights to rework and re-agitate its claim afresh on the basis of KCM as per CCI decisions, which were categorical in terming KCM as approved NHP rate for past and future.
- 52) That so far as the Water Use Charge (WUC) is concerned, the Provincial government stated that the same cannot be equated or taken at a pedestal similar to NHP.

**WAPDA response to Govt of KPK Intervention**

- 53) In response to the Govt of KPK's stance WAPDA stated that the Finance Division (CF Wing) Government of Pakistan vide letter No.F.1(11)CF-I/2011-12/398 dated 16th March, 2013 forwarded a copy of Record Note of the Discourse held at the sidelines of 8th NFC Meeting on 14.01.2013, in which it is mentioned that in response to the demand of KPK regarding uncapping the rate of NHP, it is decided that rate of NHP shall be Rs.1.10 per kWh to be approved from next financial year with annual indexation @ 5.5%.
- 54) According to the Petitioner, it was never supposed to attend that meeting, therefore, WAPDA does not know the basis/ working behind this proposed NHP rate because it was agreed at the sidelines of 8th NFC meeting. WAPDA is of the view that decision regarding uncapping the rate of NHP at Rs.1.10 per kWh with annual indexation @ 5.5% is against the mechanism of calculating NHP provided in the explanation of Article 161(2) of the Constitution of Pakistan and taken without due deliberation and participation of all the stake holders. Moreover, according to the Constitution of Pakistan, right forum to decide the rate of NHP is the Council of Common Interests (CCI) and not the Finance Division.
- 55) However, in another meeting chaired by Federal Minister for Water & Power in recent past, WAPDA has been advised to incorporate in its next Tariff Petition; NHP/WUC @ Rs.1.10 per kWh for all Hydel Power Stations payable to respective Provinces & AJK. Since NHP/WUC is a pass through item for WAPDA Hydroelectric, therefore, WAPDA Hydroelectric proposed NHP/WUC as per directives of Federal Minister.
- 56) As mentioned above, proposed rate of NHP @ Rs.1.10 per kWh which is also supported by Govt of KPK in its intervention request is not as per the explanation of NHP provided in the Article 161(2) of the Constitution of Pakistan. On the contrary, it is a generation based rate identical to WUC levied for Hydel IPPs in the GoP Policy for Power Generation. Moreover, Nature of business to the extent of generation of power by using water and sale of power at the bus-bar is same irrespective of Hydel IPPs or WAPDA Hydroelectric. Water is not consumed or lost during the generation of power; rather power is generated by using the flow of water through construction of dams and channels/ tunnels for this purpose. Since the nature and basis of both NHP and WUC,





are same for the hydel power producers, WAPDA has taken them collectively for the purpose of simplicity.

- 57) WAPDA under its Act has been mandated to develop the Indus Cascade to harness maximum hydel power generation potential available at Indus River, which stems from Himalayas and enter into Pakistan from GB area before entering into KPK. In addition to that there is tremendous hydel power generation potential available in AJK. For generation of electricity from hydel resources, WAPDA adopts similar process in all Provinces, AJK & GB. Therefore, WAPDA believes that NHP/ WUC should be uniform for all Provinces, AJK & GB and incorporated in the tariff of Hydel IPPs and WAPDA at the same rate approved by the CCI.

#### Authority's Findings

- 58) The Authority considered the submission of the intervener and the Petitioner and considers it appropriate to mention the basis of the NHP capped at Rs 6 billion and allowed provisionally to the Petitioner in about last six determinations. The issue of NHP has already been deliberated in detail in the previous determinations of the Authority. The Authority determined the WAPDA's bulk supply tariff for the first time in May 24, 2004. The Authority considers it pertinent to reproduce the relevant portion of the 2004 determination:

*"22. The Authority observes that in the explanation given with Article 161(2) of the constitution, hydel profits are treated as distinctly separate from return on investment. The Federal Government has however through the decision taken in the meeting of 09.08.1992 chaired by the Minister of Finance (participated among others by Chief Minister NWFP and Mr. A.G.N. Kazi, Deputy Chairman, Planning Commission) ensured a minimum payment of Rs. 6 billion to the Government of NWFP, by directing WAPDA to open and maintain a separate account with the National Bank of Pakistan for receipts on account of collection of surcharge as imposed for the year. National Bank of Pakistan was to be advised by WAPDA to release Rs. 500 million every month to the Government of NWFP irrespective of the balance available with them in the said account. According to the decision No. (iv) taken in the aforementioned meeting the Auditor general of Pakistan was requested to work out the net profit payable to NWFP for the year 1990-91 and 1991-92 on the basis of Kazi Committee formula. WAPDA was however allowed by the Federal Government to apply a certain surcharge within the consumer end tariff so as to be able to pay net hydel profits to the respective provinces.*

23. *The Authority further observes that CCI while deciding to adopt the methodology proposed by the Kazi Committee approved the principle as well as its future applicability but did not consider the need to specify any organization, committee or any department of the Government to calculate the net hydel profits for the future years. The Federal Government or any of its ministries or offices has so far not been able to achieve an agreement on the quantum of net hydel profits and the matter is still being discussed in the meetings of the National Finance Commission.*

24. *The Authority is not aware as to when CCI would be formulated and the expected date of its decision in the matter. However, maintaining the existing arrangement, as an interim measure, the Authority is including Rs. six billion in the Revenue Requirement of WAPDA as payment obligation of WAPDA in respect of payment of net hydel profits to the NWFP province till such time the same is determined by CCI in respect of each hydroelectric power station in operation."*





- 59) It is clear from above paras, that Rs 6 billion was allowed as an interim measure which was also concurred by the Federal Government through a letter from the ministry of Finance dated May 06, 2004 The Authority noted that the issue of revision of NHP at a rate of Rs 1.10/kWh was previously raised by Govt of KPK in its intervention request of the WAPDA Hydroelectric petition for Bulk Supply tariff for the FY 2014 which was then objected by the Petitioner.
- 60) Since the minutes of the meeting held on the side line of 8<sup>th</sup> NFC dated March 14, 2013 has been made the basis of request by both the Petitioner and the Government of KPK, therefore, the Authority consider it important to mention the actionable item of the minutes as indicated in para 5 (a) reproduced below:

*After examining the matter and going through record of the proceedings of Sub-Committee meetings, following decisions emerged out as actionable items:*

- a. *For uncapping, WAPDA and the Ministry of Water & Power may immediately approach the NEPRA through a tariff petition under the law to include the NHP @ 1.10 together with annual indexation @ 5% payable to the Government of Khyber Pakhtunkhwa. The change in tariff may take effect from next fiscal i.e. 01.07.2013*

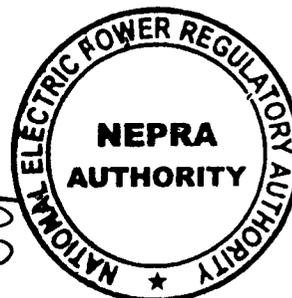
- 61) In the instant petition, WAPDA hydroelectric has informed that it incorporated the revised NHP on the basis of the aforesaid minutes of meeting and upon the instruction of Minister of Water and Power. Govt. of KPK has also requested the Authority to uncap the NHP in accordance with the aforesaid minutes. The Authority observed that unlike in 2013 WAPDA tariff determination, this time the Petitioner has also made this document a basis for the NHP calculation. The Petitioner has also informed that such revision in NHP was made at the behest of the federal government through the Ministry of Water and power. The Authority considers that it has already allowed NHP of Rs 6 billion per annum to WAPDA Hydroelectric in its previous determinations as an adhoc/interim arrangement as per direction of GoP. GOP has now decided to increase the NHP payable to Government of KPK at Rs 1.10/kWh which is still an interim arrangement. In view of the above, the Authority decided to provisionally uncap the NHP payable to Government KPK in accordance with para 5 (a) of the minutes of meeting reproduced above with annual indexation of 5% per annum. The petitioner is advised to ensure monthly payment of the NHP to the Government of KPK.
- 62) While reviewing the Petitioner's NHP working, the Authority noted that the Petitioner has incorrectly applied the NHP rate on the overall projected generation from all WAPDA Hydroelectric plants irrespective of their location for the FY 2016. As agreed in the aforesaid minutes, the revised rate is strictly to be applied to power stations established in the province of KPK. Therefore, while working out NHP for the FY 2016, the Authority has decided to apply the rate of Rs 1.10/kWh on the WAPDA Hydroelectric Power Stations in the province of KPK. The Petitioner requested for application of revised NHP w.e.f from FY 2016. The Authority therefore, allow the revision in NHP amount from the FY 2016 onward. Provinces other than KPK, should approach CCI for resolution of NHP issue (if any).
- 63) The Authority observed that, under Article 161(2) of the Constitution, Council of Common Interests (CCI) is the competent forum to determine the Net Hydrel Profit (NHP) payable to the provinces. The operative part of the Article 161 (2) along with Explanation is as follows



“ 161 (2) The net profits earned by the Federal Government, or any undertaking established or administered by the Federal Government from the bulk generation of power at a hydro-electric station shall be paid to the Province in which the hydro station is situated.

**Explanation-** For the purpose of this clause “net profits” shall be computed by deducting from the revenues accruing from the bulk supply of power from the bus-bars of a hydro-electric station at a rate to be determined by the Council of Common Interests, the operating expenses of the station, which shall include any sums payable as taxes, duties, interests or return on investment, and depreciations and the element of obsolescence, and over-heads, and provision for reserves.”

- 64) The Authority further observed that in-furtherance of Article 16 1 (2) of the Constitution, the CCI approved the Kazi formula for determination of NHP for revenues accruing from generation of power from a hydro-electric station. This was followed by promulgation of Presidential Order No. 3, wherein WAPDA was made responsible for payment of NHP to NWFP and the federal government was designated as guarantor. Unfortunately, the decision of CCI pertaining to NHP never got implemented. However, in August 1992, on the direction of then federal finance minister, and under an interim arrangement, a minimum payment of Rs. 6 billion annually started being paid to NWFP. In the instant WAPDA Hydel tariff petition, the Authority has once again allowed payment of NHP to KPK as an interim arrangement, at an enhanced rate of Rs. 1.10/kWh. The Authority expressed its concern that such interim arrangements cannot be allowed to continue in perpetuity. It has been more than eleven years that the Authority is allowing an interim payment to the petitioner on account of petitioner’s obligation of payment of NHP to KPK. There is therefore need for arriving at a permanent arrangement.
- 65) Authority observed that under Section 7, 31 and 45 of the NEPRA Act, 1997, the Authority is vested with the exclusive right to determine tariff, rates, charges and other terms and conditions for supply of electric power services by the generation, transmission and distribution companies set up on various fuels including hydropower. And that, CCI is competent to formulate and regulate policies in relation to NEPRA and exercise supervision and control over it in accordance with Article 154 of the Constitution, including computation of NHP.
- 66) The Authority is of the view that, notwithstanding the clear provisions of NEPRA Act, the concurrent jurisdiction of CCI and NEPRA over the subject of NHP and keeping in view the past history, conflicting claims, different interpretations and acrimony surrounding this subject and the fact that it is a serious matter of a political nature affecting relations between a province and the federation, the CCI may resolve the matter by issuing policy guidelines to NEPRA to determine NHP keeping in view, inter alia, CCI’s earlier decisions, and ensure compliance with the provisions of the Constitution and NEPRA Act, 1997. The Authority therefore directs WAPDA, to bring this matter before the CCI, through the Ministry of Water and Power, to enable NEPRA in the determination of next year WAPDA Tariff Petition in accordance with the policy guidelines and under supervision of the CCI.





- 67) With regard to equating Water Use Charge (WUC) with Net Hydel Profit, the Authority is of the opinion that WUC is distinct from NHP and should not be confused with each other. The WUC is a charge for water usage, and has its origin in the power policy of 2002. While NHP owes its existence to the constitution of 1973.
- 68) The Authority deliberated upon the issue of location of Gomal Zam hydel power station (GZHPS) and Warsak Hydel Power Station (WHPS). The Authority observed that the WAPDA Hydroelectric License clearly indicated that GZHPS is located on the right bank of the Gomal River at Khajuri Kach in South Waziristan Agency therefore, it does not fall in KPK and for NHP calculation, this station should be excluded.
- 69) Moreover, in the Petitioner's license, WHPS is indicated to be in the province of KPK. The issue of geographical location of Warsak Hydel Power station (WHPS) also came for discussion in Licensee proposed modification of the WAPDA hydroelectric in 2008, wherein, the Petitioner sought modifications in the geographical location of WHPS. While deciding on the issue the Authority noted that
- "...the determination of geographical boundaries of province/country is not NEPRA's mandate and the matter is sub-judice, the Authority directs the parties to resolve the issue before the competent forum. Upon resolution of the same, necessary modification, if any, would be made in the license accordingly..."*
- 70) Since no record has been placed before the Authority from relevant agency that indicates the change in the geographic boundaries of WHPS, the Authority decided to include generation of WHPS in the total calculation of NHP payable to Government of KPK as per the existing arrangement.
- 71) Based on the above discussion and while taking a projected generation of 17,004 gWh on account of hydel power stations situated in KPK, NHP @ Rs 1.10/kWh for FY 2016 works out to be Rs 18,704 million against Rs 6000 million previously allowed and therefore, the Authority is including Rs. 18,704 million in the Revenue Requirement of WAPDA as payment obligation of WAPDA in respect of payment of net hydel Profit to the KPK province, as an interim arrangement.





- Whether the Petitioner's claim of total Regulatory asset base amounting to Rs 381,506 million is justified?
- Whether the proposed WACC of 16.374% is justified?
- Whether the debt equity ratio of 18:82 for hydel power station and 81:19 for hydel power projects is justified?

72) The Petitioner informed that it is actively pursuing its development program and would add 8,298 MW to the installed capacity in the years to come by completing the under construction projects. According to the Petitioner, 106 MW Golen Gol is in advance stage and scheduled to be completed by 2017 followed by 1410 MW Tarbela 4<sup>th</sup> Extension and 122 MW Keyal Khwar hydel power projects which are scheduled to be completed by 2018. Preliminary works of priority Mega hydel projects DASU-I (2,160 MW) and Diamer Bhasha Dam (4,500 MW) are underway and the projects are expected to start operation by 2021 and 2024 respectively. The Petitioner provided the following on-going Hydel power development projects detail of generation as under:

**Projects Under Construction**

Sr.No.	Project	MW	Expected Completion
1	Golen gol	106	2017
2	Tarbela 4 <sup>th</sup> Extension	1,410	2018
3	Keyal Khwar	122	2018
4	DASU-I	2,160	2021
5	Diamer Bhasha Dam	4,500	2024
	<b>Total</b>	<b>8,298</b>	



73) Other priority projects of Bunji (7,100 MW), Tarbela 5th Extension (1,410 MW) Mohmand Dam (840 MW) and Kurram Tangi Dam project (83 MW) will also be advanced on availability of funding sources and modification of WAPDA generation license will be applied at the appropriate time.

74) In this petition, WAPDA Hydroelectric has bifurcated its Regulated Asset Base (RAB) & Weighted Average Cost of Capital (WACC) into its already commissioned stations and its upcoming projects. For the Hydel power stations, net RAB at the end of FY 2015-16 is estimated as Rs.190,127 Million which represent equity financing of Rs. 156,226 million (82%) and debt, of Rs. 33,901 million (18%).

**Hydro Power Stations**

75) According to the Petitioner, Plant & Machinery of existing Hydel Power Stations has been stated at replacement/revalued price and revaluation surplus of Rs. 58 billion recorded in the accounts accordingly. Whereas, to arrive at the figure of Regulatory Assets Base, the amount of



Revaluation Surplus has been excluded. The Regulatory Assets Base of Hydel Power Stations for FY 2013–14 (Audited) and Budgeted for FY 2014–15 & FY 2015-16 is provided below:

- 76) According to the Petitioner, the Debt/ Equity ratio of Hydel Power Stations for FY 2015-16 works out as **18:82**, whereas, WACC has been worked out at **16.374%**. The detail provided are given hereunder:

WAAC for Hydel Power Station	2015-16	2014-15	2013-14
	Projected	Projected	Audited
Average RAB (Mln Rs)	190,127	192,027	178,969
<b>Financing of RAB</b>			
Average Debt (Mln Rs)	33,900	39,922	40,250
Average Equity (Mln Rs)	156,227	152,106	138,719
Cost of Debt (% age)	13.487%	13.406%	14.378%
ROE (% age)	17.00%	17.00%	17.00%
<b>Debt/Equity Ratio</b>	<b>18:82</b>	<b>21:79</b>	<b>22:78</b>

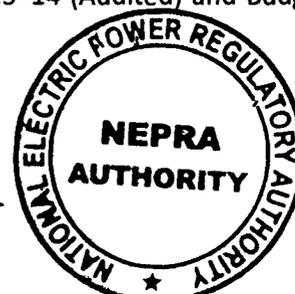
- 77) On the basis of budgeted Average Regulatory Asset Base and WACC for FY 2015–16, the budgeted amount of Return on Investment of Hydel Power Stations requested by the Petitioner is indicated as under:

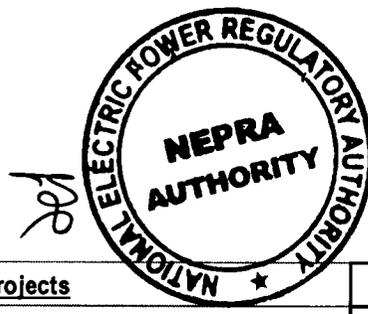
ROI on Hydel Power Stations	2015-16	2014-15	2013-14
	Budgeted	Actual/Prov.	Audited
Average Net Fixed Assets in Operation	190,127	192,027	178,969
WACC (% age)	16.374%	16.253%	16.410%
<b>(Return on Investment ROI)</b>	<b>31,131</b>	<b>31,210</b>	<b>29,369</b>

#### Hydro Power Projects

- 78) According to the Petitioner, Net Regulatory Assets Base of Hydel Power Projects at the end of FY 2015-16 is estimated as Rs.191, 379 million which represents equity financing of Rs. 36,046 million (19%) and debt of Rs. 155,333 million (81%).

- 79) The Petitioner informed that Additional capital investment will be made on Tarbela 4th Extension, Golen Gol, Keyal Khwar to progress towards the completion of the projects and infrastructure development cost on the Diamir Basha Dam and Dasu-I will also be made to execute the project. However, no project will start commercial operation during FY 2015-16. The Regulatory Assets Base of Hydel Power Projects for FY 2013–14 (Audited) and Budgeted for FY 2014–15 & FY 2015-16 is worked out as under:





RAB for Hydel Power Projects	2015-16	2014-15	2013-14
Rs in million	Projected	Projected	Audited
Capital Work In Progress (Opening)	108,450	60,004	52,412
Add: Capital Work In Progress (Investment)	165,859	48,979	42,008
Less: CWP Transferred to Fixed Assets	-	(533)	(34,416)
<b>Capital Work In Progress (Closing)</b>	<b>274,309</b>	<b>108,450</b>	<b>60,004</b>
<b>Average Capital Work in Progress</b>	<b>191,379</b>	<b>84,227</b>	<b>56,208</b>

- 80) As per WAPDA Hydroelectric, In FY 2014-15 & FY 2015-16 changes in Debt/ Equity ratio was due to addition of new loans. The Debt/ equity ratio for FY 2015-16 works out as 81:19.
- 81) The Petitioner claimed a WACC of 11.969% for FY 2015-16 with proposed financing of greater part of capital cost of projects through commercial loans with sovereign guarantee instead of GOP relent loans. On the basis of budgeted Average Regulatory Asset Base and WACC for FY 2015-16, the budgeted amount of Return on Investment of Hydel Power Projects as provided by the Petitioner is indicated below:

ROI on Hydel Power Projects	2015-16	2014-15	2013-14
	Budgeted	Actual/Prov.	Audited
Average Capital Work in Progress	191,379	84,227	56,208
WACC (% age)	11.969%	14.195%	13.405%
(Return on Investment ROI)	22,906	11,956	7,535

- 82) The Petitioner was also asked to provide its comments on the issue identified above, accordingly the Petitioner provided the following response

**Whether the Petitioner's claim of total Regulatory Asset Base amounting to Rs.381,506 million is justified.**

- 83) According to the Petitioner, an increase in Total Regulatory Asset Based is due to incurring more capital expenditures on the under construction projects of Golen Gol, Keyal Khawar, Tabela 4th Extension, Dasu and Diamer Basha Projects.

**Whether the claimed Weighted Average Cost of Capital (WACC) of 16.374% is justified?**

- 84) On repayment of loans, net cost of operating assets is now mainly comprised equity financing which earns return @ 17% per annum while average Cost of Debt is 13.487% this makes WACC 16.374%.

**Whether the debt equity ratio of 18:82 for hydel power station and 81:19 for Hydel power projects is justified?**

- 85) The Petitioner informed that debt equity ratio of 18:82 for Hydel power station is due to the fact that most of the debts of existing Hydel Power Stations have been retired and further reducing each year due to repayment of debt. Whereas, in case of Hydel Power Projects major proportion

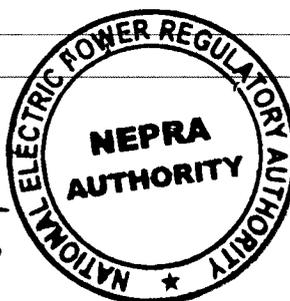


of project cost is being financed through new debt, which are in permissible range of debt/equity ratio of new projects.

#### **Weighted Average Cost of Capital Assessment (WACC)**

- 86) The Authority noted that the Petitioner took the initiative and provided the bifurcation of the Return into stations and projects for which Petitioner's efforts are lauded. The Authority is aware that assessment of RAB is the most important component in the Petitioner's Revenue Requirement (RR). The Weighted Average Cost of Capital (WACC) on RAB value constitute close to 50% of the total Rs 111.2 billion of its claimed Revenue requirement for FY 2016.
- 87) The Petitioner debt to equity ratio is not optimal, particularly for the stations where debt portion is as low as 18% and the corresponding equity portion is 82%. In case of IPPs, the Authority allows equity portion to the maximum of 30%. For Discos, where the same model of RR with WACC return is in vogue, the Authority uses an optimum capital structure that ranges from 70:30 to 80:20.
- 88) The Petitioner was given an opportunity to explain why its debt to equity ratio is suboptimal compared to the benchmark ratio that ranges from 70:30 to 80:20 allowed to other generation projects. The Petitioner explained that the stations' debt portion is low because the debts of existing hydel power stations have been retired and will be further reduced in the future years due to depreciation. The Petitioner argued that depreciation was supposed to cater for the principal repayment. According to the Petitioner, some of the portion of asset like building and civil works are depreciated in as much as 50 years, whereas, the GOP funded project has a repayment period of 15-25 years. There is a huge mismatch between the two so higher return which is because of higher equity portion is reinvested into the ongoing project to pay Interest on debt.
- 89) The Authority didn't agree with the argument presented above and is of the opinion that even if the 70; 30 debt equity is assumed, the Petitioner will still manage to pay not only the minimum amount of interest due on capital structure that has a low debt, but also the additional interest that is accumulated by application of the higher percentage of debt —from let say 18% to 70%, can be used to fund future interest payments/CAPEX. Under the optimum structure, the Petitioner will only receive less RoE in absolute terms. The Authority further observes that, the reason of using a higher portion of debt in the capital structure is to mitigate the impact of cost of equity, which is always higher than the cost of debt. In case of WAPDA, the RoE is 17%, whereas, cost of debt varies from 9.57% to 14.378%.
- 90) Therefore, in order to be consistent with other decisions of the Authority in case of IPPs/Discos, the Authority decided to allow a debt equity ratio in the range of 70:30 and 80:20 wherever applicable. Accordingly, the following weighted average cost of capital (WACC) has been worked out for assessing returns:

<b>Weighted Average Cost of Capital (WACC)</b>		<b>FY 2016</b>	<b>FY 2015</b>	<b>FY 2014</b>
WACC Stations	(%age)	14.54%	14.48%	15.16%
WACC Project	(%age)	12.04%	14.12%	11.80%





91) On the issue of allowance of return and interest payment for the under construction projects, AKLA was of the opinion that in case of IPPs, NEPRA is not allowing recovery of any part of the tariff before its COD therefore, allowing WACC to CWIP/ongoing projects of the Petitioner is discriminatory. The Authority has considered the comments of the stakeholders regarding inclusion of capital work in progress in the regulatory asset base and the Petitioner's response thereto. The Authority has noted that the issue of inclusion of capital work in progress in the regulatory asset base has already been addressed by the Authority in its previous determinations. For reference purpose, the Authority is reproducing the para 12.5 to 12.6 of determination dated November 10, 2011 wherein the reasons behind allowance of WACC during construction is given in the matter of Bulk supply tariff for FY 2011-12 determination:

12.5 *The Regulatory Asset Base (RAB) for WAPDA Hydroelectric is approved on the basis of last year's audited accounts and careful projection of further investments to be made by WAPDA Hydroelectric in the ensuing financial year, so as to ensure a reasonable return on its investments. The return allowed to WAPDA Hydroelectric is primarily meant for meeting its obligation for payment of financing cost on loans borrowed from the financial institutions for the existing as well as new hydropower projects and also to allocate sufficient funds from its own sources for the development of new hydropower project, in the form of its equity. The Regulatory Assets Base (RAB) of WAPDA Hydroelectric, therefore, comprises of two basic components i.e. Net Fixed Assets in Operation and the work in progress. Both of these components are financed through debt and equity investment. The net return to be earned by WAPDA Hydroelectric is utilized for development of new hydropower projects. If WAPDA hydroelectric is not allowed any return on its Work in Progress component as suggested by the Intervener and other commentators, then its ability to meet its obligations on the borrowed capital and also to make its own investment in the new hydropower projects will be severely affected. Further, there is a long gestation period for the development of hydropower projects and, therefore, denying return on its investments for the under construction power projects till their completion, is likely to cause further delay in their completion due to lack of adequate funds by the Petitioner.*

12.6 *It is also worth mentioning here that the Authority has already allowed return on equity during the project construction period in the case of all IPPs in accordance with the GOP Policy 2002. The Authority, therefore considers that disallowing return on the work in progress component to WAPDA Hydroelectric as suggested by the intervener and other commentators is neither fair nor justified."*

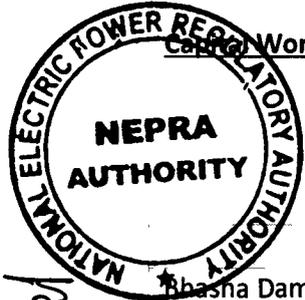
92) In view of the above, the Authority therefore, maintains its earlier position on this issue. However, the Authority may re-examine the issue of allowing WACC on CWIP of ongoing projects at a later stage if the need arises.

#### **Regulated Asset Base (RAB) Assessment**

93) The Petitioner provided audited accounts of FY 2014, provisional accounts of FY 2015 and shared its projections for FY 2016 for RAB calculation. The Authority reviewed the projections of Capital Work In Progress (CWIP)/upcoming hydro power projects and observed that the Petitioner has parked huge capex expenditure, especially in the FY2016 which amounts to about Rs 166 billion as indicated in the table below. The Authority while being aware of the Petitioner's past expenditure trend noted that it is highly unlikely for an organization like WAPDA, being in the



public sector to spend all of the amount in one year due to lengthy procedural requirements . The Petitioner while justifying the high CWIP projection, argued that 2160 MW Dasu-stage -I is on GOP priority list therefore, advance payment to contractors are due for 2160 MW Dasu stage-I which is the reason for high CAPEX for FY 2016.



Capital Work in Progress FY 2015-16 (Projected)

(Million Rs)

	Opening Balance 01-07-2015	Addition/ (Deletion)	Transferred to Fixed Assets	Balance as on 30-06-2016
Bhasha Dam Project	52,279	33,746	-	86,025
Tarbela 4th Extension	24,780	35,164	-	59,944
Golan Gol	13,828	9,691	-	23,519
Dasu Hydro Power Project	7,618	77,998	-	85,616
Keyal Khawar HPP	2,733	4,075	-	6,808
Mangla Rehabilitation	1,054	3,374	-	4,428
Warsak Rehabilitation	7	84	-	91
Mangla Training Institute	109	196	-	305
Others (at feasibility stage)	6,042	1,531	-	7,573
	<b>108,450</b>	<b>165,859</b>	-	<b>274,309</b>

94) The total estimated project cost for Dasu stage –I is around Rs 380 billion, excluding the IDC amounting to Rs 112.2 billion as per the information submitted. The Authority understands, that large project capex outflow is uneven on year to year basis, but for argument's sake, if the project is assumed to be completed even in six years instead of 5, the Petitioner will still be spending on average about Rs 63 billion per year. The Authority is informed that, in the coming years, the Petitioner is embarking on at least two big hydro power projects i.e. 4500 MW Diamir Basha dam and 2160 MW Dasu-I. In the Authority's opinion, unlike other small projects, these two projects are going to significantly increase CWIP in the years to come.

95) This time, the Petitioner submitted the activity wise CAPEX expenditure however, the Authority is not convinced that the requested cost if allowed will be fully utilized as whole and in the same activity head as claimed. Rationalization has to be made in order to ensure that consumers are not unnecessarily burdened, and at the same time Petitioner's genuine requirements are not curtailed. Too much slashing of cost may hamper the Petitioner's ability to bring these nationally important hydro projects on time. In view of the above discussion, the Authority has decided to allow Rs 43 billion to cater for the Petitioner's payment obligation due in FY 2016 on account of Dasu-I Land acquisition and resettlement cost, Civil, Electromechanical Hydraulic works & other overheads. For all other projects excluding Diamir Basha Dam project, the Authority decided to allow Rs 27.65 billion as reasonable estimate for FY 2016 in order to compute cost of debt and cost of equity i.e. WACC as per the approved benchmark debt to equity ratio.

96) The Issue of cost apportionment of upcoming power project of Diamir Bhasha Dam into water (WAPDA's non-regulated business) and power (WAPDA's regulated business) also came under



discussion. In this regard, the Petitioner was directed to certify whether any of the projects, included in the CWIP, particularly Diamir Basha (DB), relates to water wing of the WAPDA. If so, then explain why cost of such projects should be allowed in the WAPDA hydroelectric tariff, which only deals with the power projects. The Petitioner responded that all six projects currently under construction, including Basha are hydel power generation projects and covered in the Generation License of WAPDA Hydroelectric. The Petitioner informed that since the main purpose of the DB is power generation and the augmentation of generation downstream Diamir Basha through efficient management of Indus water therefore, the whole cost of the DB project pertains to power generation and is being claimed in power sale tariff of WAPDA Hydroelectric. The Petitioner was of the view that the main purpose of the construction of the reservoir / Dam in DB project is to create head for power generation. The Water from this reservoir /dam will be regulated according to the need for power generation and no irrigation channel/ canal is planned up till Tarbela dam.

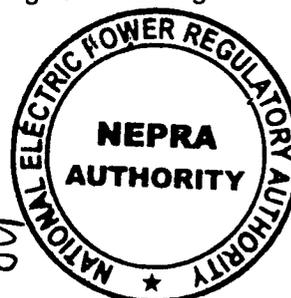
97) The Authority did not agree with Petitioner's argument that DB is exclusively a power project and that its entire cost should not be borne by the consumers. In this regard, the Authority carefully reviewed the decision(s) of the Council of Common Interests (CCI) dated July 29, 2010 on the national consensus for construction of Diamer Basha Dam project which reveals that DB has a significant water storage component. In the same decision, the CCI decided that water distribution from the source shall be regulated as per Water Apportionment Accord, 1991.

98) The Authority also reviewed the PC (1) of the project and noted that the justification for construction of DB has been based on the serious depletion of on-line water storages (Mangla, Tarbela and Chashma). It has been argued in the PC 1 that the construction of DB will make up for the storage capacity loss of about 6 MAF already experienced by the online storages. This further reaffirms that DB project is a power and as well as a water project. Therefore, based on the available information, the Authority decided to apportion the cost of the project to water and power in a ratio of 60% & 40%, respectively w.e.f FY 2014, similar to the ratio of apportionment approved for Tarbela power project. Accordingly the following expenditure is allowed on account of Diamir Basha dam:

	<b>FY 2014</b> Rs in million	<b>FY 2015</b> Rs in million	<b>FY 2016</b> Rs in million
Diamir Basha Capital Expenditure (allowed) ending balance	12,597	14,380	25,059

99) In future, a more accurate picture of the share of water and power can be gauged once reliable information is submitted. The Authority therefore, directs the Petitioner to approach the Federal Government to pick up the remaining portion of cost disallowed by the Authority.

100) Based on the above discussion, and the information given following is the return assessment compared with the requested return.



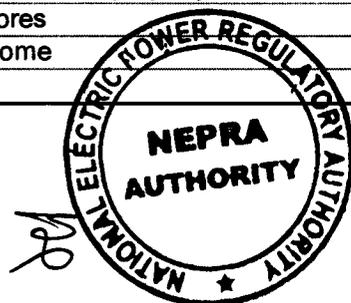


Return Assumptions	2014		2015		2016	
	Requested	Allowed	Requested	Allowed	Requested	Allowed
Station (Rs in million)	178,969	178,969	192,027	191,646	190,127	189,364
Project/CWIP (Rs in million)	56,208	40,025	84,227	43,047	191,379	87,597
<b>Total Averag Regulatory Asset Base(RAB)</b>	<b>235,177</b>	<b>218,994</b>	<b>276,254</b>	<b>234,693</b>	<b>381,506</b>	<b>276,960</b>
<b>Station</b>						
Debt/Capital	22%	70%	21%	70%	18%	70%
Cost of Debt	14.4%	14.4%	13.4%	13.4%	13.5%	13.5%
RoE	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%
WACC	16.410%	15.165%	16.253%	14.484%	16.374%	14.541%
<b>Projects</b>						
Debt/Capital	48%	70%	68%	70%	81%	80%
Cost of Debt	9.6%	9.6%	12.9%	12.9%	10.8%	10.8%
RoE	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%
WACC	13.405%	11.800%	14.195%	14.118%	11.969%	12.041%
Station Return (Rs in million)	29,369	27,140	31,210	27,759	31,131	27,535
Project Return (Rs in million)	7,535	4,723	11,956	6,077	22,905	10,547
<b>Total Average WACC</b>	<b>15.69%</b>	<b>14.55%</b>	<b>15.63%</b>	<b>14.42%</b>	<b>14.16%</b>	<b>13.75%</b>
<b>Total return (Rs in million)</b>	<b>36,904</b>	<b>31,863</b>	<b>43,166</b>	<b>33,836</b>	<b>54,036</b>	<b>38,083</b>

Whether the proposed Other Income of Rs. 431 million for FY 2015-16 is justified?

- 101) According to the Petitioner, in its last determination, NEPRA fixed other income of Rs.1,049 Million for WAPDA Hydroelectric by also including income derived from bank balances, whereas NEPRA does not allow anything in the Revenue Requirement of WAPDA to meet with its day to day working capital needs. Further NEPRA does not include cash fund in hand balance in the Regulatory Assets Base to allow Return on Investment. Therefore mark-up earned on cash balances should not be deducted from the Revenue Requirement of WAPDA.
- 102) According to the Petitioner, actual other income during FY 2013-14 from assets other than financial assets remained Rs.413 Million as against determined amount of Rs1,049 Million. Provisional other income during FY 2014-15 has been estimated as Rs.422 Million, whereas, other income of Rs.431 Million has been projected for FY 2015-16.

Income from assets other than financial assets	2015-16	2014-15	2013-14
	Projected	Projected	Audited
Amortization of Grant	228	228	228
Income from lease of other property	71	67	64
Sales of Scrap/Stores	7	7	7
Miscellaneous Income	125	120	114
<b>Total</b>	<b>431</b>	<b>422</b>	<b>413</b>





103) In the previous determination the authority has consistently deducted other income from financial asset as well income from non-financial assets. Therefore, Petitioner's plea for only deduction from non-financial asset is inconsistent with previous practice therefore, can't be accepted. Accordingly, based on the Audited accounts of FY 2014, unsigned audited accounts of FY 2015 and while taking 2016 values as an estimate for FY 2016, the other income —both from financial and nonfinancial asset — works out as follow which is being allowed to be deducted from the RR.

Other Income	2015-16	2014/15	2013-14
<b>Income - Financial Asset</b>			
profit on bank balance	2,100	2,100	422
Interest Income-Investments	346	346	99
<b>Total Financial (A)</b>	<b>2,446</b>	<b>2,446</b>	<b>521</b>
<b>Income - Non-Financial Asset</b>			
Amortization of Grant	856	856	228
Income from lease of other property	86	86	64
Sales of Scrap/Stores	7	7	7
Miscellaneous Income	51	51	114
<b>Total non Financial (B)</b>	<b>1,001</b>	<b>1,001</b>	<b>413</b>



Whether or not separate tariffs should be determined for each of the Petitioner's current power stations and upcoming power projects?

104) On this issue, Anwar Kamal and Law Associate (AKLA) submitted that WAPDA Hydroelectric Power consists of various Generating Units like Tarbela, Mangla, and Warsak etc. Since in the case of GENCOs the Generating Units also comprise different Blocks/Units and the Tariff of each Block is determined separately, AKLA questioned, why in the case of WAPDA Hydroelectric is the Tariff of each Block not being determined separately? AKLA contended that separate tariff for each unit will enable the consumer to know station wise tariffs.

105) In response, the Petitioner stated that the Generation License, last modified by NEPRA on 09-01-2015 for WAPDA is of installed capacity of 17,359.96 MW which contains 9,602 MW for 19 Hydel Power Stations in operation and 7,757.96 MW for 5 under construction Hydel Power Projects. Bulk Supply Tariff is worked out for aggregated installed capacity in operation while Hydel power station wise calculation of each component of revenue requirement and calculation of power station wise tariff is appended at Annex-13 of the tariff petition

106) The Authority took cognizance of the comments of the commentators and the Petitioner's response thereto, and is of the opinion that individual unit tariffs will bring transparency into the scheme of WAPDA. It will also help establish clear time lines by which a particular plant will have to achieve COD within the cost bracket allowed by the Authority and therefore, strict checks and balance can be ensured as in vogue on private sector power plants. In this regard, the Petitioner was asked to submit plant wise details like, total project cost, total capex incurred so far, source of funding etc. After reviewing the information provided, the Authority is of the opinion that in the



absence of independent certification of the assumption and cost allocation provided by the Petitioner this exercise cannot be undertaken at this stage. Therefore, the Authority directs that in the next tariff petition, the Petitioner shall ensure that it presents its tariff petition based on the individual stations and the detail breakup of the cost of upcoming power projects along with assumptions/basis duly certified from a reputable audit firm.

Whether annual estimated production of 31,752 GWh each for FY 2014-15 and for FY 2015-16 based on existing as well as incoming hydropower stations is justified?

107) The Petitioner submitted that the generation of 31,752 GWh has been proposed on the basis of average generation of last 5 years by including estimated generation from recently completed Hydel Power Stations. The Petitioner further informed that actual generation of 31,780 GWh has been recorded during FY 2014-15 which also support the projected generation of 31,752 GWh for FY 2015-16. Following hydro power station wise installed capacity and annual generation for financial year 2013-14 has been claimed by the Petitioner

Sr.No.	Hydel Power Station	Installed Capacity	2015-16 (Budgeted)
		MW	GWh
1	Tarbela	3,478	14,284
2	Ghazi Brotha	1,450	6,910
3	Mangla	1,000	5,992
4	Warsak	243	1,021
5	Chashma	184	1,055
6	Duber Khawar	130	627
7	Allai Khawar	121	269
8	Jinnah HPP	96	463
9	Khan Khawar	72	595
10	Jabban	22	88
11	Rasul	22	122
12	Dargai	20	100
13	Gomal Zam	17	96
14	Nandipur	14	40
15	Shadiwal	14	34
16	Chichoki	13	33
17	Kuram Garhi	4	16
18	Renala Khurd	1	3
19	Chitral	1	4
	<b>Total</b>	<b>6,902</b>	<b>31,752</b>



108) The claimed installed capacity and annual generation is considered reasonable by the Authority and is therefore accepted. The Petitioner has claimed that 99% of its total revenue requirement be allowed as a fixed charge and 1% of its total revenue requirement be allowed as a variable charge. This claim is inconsistent with the total revenue requirement apportionment basis of 95% fixed and 5% variable allowed to the Petitioner in the previous determination, therefore the request is declined.



Whether Petitioner's request for adjustment of Rs 9,192 million for FY 2013-14 and Rs2, 165 million for FY 2014-15 on account of Regulatory Revenue Gap is justified?

	2014-15			2013-14		
	NEPRA	Actual/Prov	Rev. Gap	NEPRA	Audited	Rev. Gap
	Notified by GoP 27-02-15			Notified by GoP 27-02-14		
<b>Annual Revenue Requirement</b>						
O&M	8,591	11,421	2,830	8,591	10,493	1,902
Depreciation	5,182	5,588	406	5,182	4,956	(226)
Ijara Rental	1,506	3,570	2,064	1,506	2,327	821
Net Hydel Profit/Water Usage Charge	6,742	6,899	157	6,742	6,859	117
IRSA Charges	159	159	(0)	159	157	(2)
Return on Investment	34,034	43,166	9,132	34,034	36,904	2,870
Other Income	(1,049)	(422)	627	(1,049)	(413)	636
Revenue Gap		-	-		-	-
<b>Total</b>	<b>55,165</b>	<b>70,382</b>	<b>15,217</b>	<b>55,165</b>	<b>61,283</b>	<b>6,118</b>
Revenue Gap (proportionated)*	12,636	-	(12,636)	6,318	-	(6,318)
	<b>67,801</b>	<b>70,382</b>	<b>2,581</b>	<b>61,483</b>	<b>61,283</b>	<b>(200)</b>
Less: Billing of Revenue	67,801	68,217	(416)	61,483	52,091	9,392
<b>Total Revenue Gap</b>	<b>-</b>	<b>2,165</b>	<b>2,165</b>	<b>-</b>	<b>9,192</b>	<b>9,192</b>
<b>NEPRA Allowed Revenue Gap Apportionment*</b>			<b>Total Gap</b>	<b>18954</b>		
	Mar-June	4 months	2013-14	6318		
	Jul- Feb	8 months	2014-15	12636		

109) The Petitioners provided the following reasons for increase in regulated revenue gaps;

- Instead of retiring benefits contribution as per Projected Unit Credit, allowing actual contributions made by WAPDA Hydroelectric to Pension fund which was low due to not having adequate space in the revenue requirements determined by NEPRA.
- Actual additions to the Regulatory Assets Base were higher than the estimates made while determining tariff by NEPRA.
- The prudently incurred actual O&M expenses were higher than those of estimated while determining revenue requirement by NEPRA.
- The Authority has already made its decisions regarding various year wise costs claimed by the Petitioner in the preceding paras of this determination. Further, sales revenue of the Petitioner is being adjusted on actual basis. Accordingly regulatory revenue gap of the Petitioner, assessed by the Authority, for the financial year 2013-14 and financial year 2014-15 is as follows:





*Determination of bulk supply tariff for  
WAPDA Hydroelectric  
Financial Year 2015-16*

Regulatory Revenue Gap	2014-15			2013-14		
	Previous allowed	Assessed	Rev. Gap	Previous allowed	Assessed	Rev. Gap
<b>Annual Revenue Requirement</b>						
O&M	8,591	9,517	926	8,591	9,317	726
Depreciation	5,182	5,090	(92)	5,182	4,956	(226)
Ijara Rental	1,506	3,401	1,895	1,506	2,327	821
Net Hydel Profit/Water Usage Charge	6,742	6,899	157	6,742	6,859	117
IRSA Charges	159	159		159	157	(2)
Return on Investment	34,034	33,836	(198)	34,034	31,863	(2,171)
Other Income	(1,049)	(3,447)	(2,398)	(1,049)	(934)	115
<b>Total</b>	<b>55,165</b>	<b>55,455</b>	<b>290</b>	<b>55,165</b>	<b>54,545</b>	<b>(620)</b>
Revenue Gap (proportionated)	12,636	-	(12,636)	6,318	-	(6,318)
Previous balance	67,801	55,455	(12,346)	61,483	54,545	(6,938)
Less: Billing of Revenue (actual)	67,801	68,111	(310)	61,483	52,091	9,392
<b>Total Revenue Gap</b>	<b>-</b>	<b>(12,656)</b>	<b>(12,656)</b>	<b>-</b>	<b>2,454</b>	<b>2,454</b>

110) In view of discussions in the preceding paragraphs, the total revenue requirement of the Petitioner approved for the financial year 2015-16 is as follows:

Revenue Requirement	Assessed FY 2016 Rs in million
Total O&M	10,447
Depreciation Charges	5,599
Ijara Rental	3,574
Return (stations)	27,535
Return (Projects)	10,547
<b>Total Returns</b>	<b>38,083</b>
Irsa Charges	159
NHP	18,704
Water Use Charge	899
other income	(3,447)
<b>Revenue Requirement (RR)</b>	<b>74,018</b>
Revenue Gaps 2014	2,454
Revenue Gaps 2015	(12,656)
<b>Total RR</b>	<b>(10,202)</b>
	<b>63,816</b>



111) On the basis of aforementioned the following tariff has been approved for the Petitioner:



Tariff	Fixed charge Rs./kW/Month	Variable charge Paisa/kWh.
Regular tariff	848.941	11.656
Recovery of revenue gap	(117.012)	(1.607)
<b>Total tariff</b>	<b>731.929</b>	<b>10.049</b>

**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) within the National Transmission and Despatch Company (NTDC) 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.

Fixed charge: Rs. 731.929 per kW per month of installed capacity

And

Variable charge = Ps. 10.049 per kWh delivered.

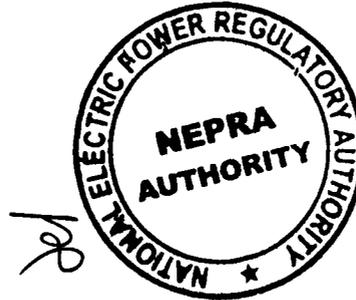
2. The above tariff is applicable for a period of one year from date of its notification by GoP, after which the following tariff will be applicable:

Fixed charge: Rs. 848.941 Per kW per month of installed capacity

And

Variable charge = Ps. 11.656 per kWh delivered.

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.





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.

**AUTHORITY**

(Khawaja Muhammad Naeem)  
Member

(Maj. (R) Haroon Rashid)  
Member

(Himayat Ullah Khan) 13.11.15  
Member

(Syed Masood ul Hassan Madni) 13/11/15  
Member

(Brig. (R) Tariq Saddozai)  
Chairman



13.11.15