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No. NEPRA/R/TRF-100/2009/4948-4950
April 14, 2016

Subject: **Decision of the Authority in the matter of Tariff Adjustment at Commercial Operation Date of 84 MW New Bong Escape Hydropower Project – Laraib Energy Limited (LEL) [Case No. NEPRA/TRF-100/2009]**

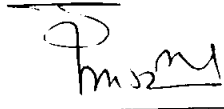
Dear Sir,

Please find enclosed herewith the subject decision of the Authority along with Annexure-I, II & III (29 pages) in Case No. NEPRA/TRF-100/2009.

2. 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).

3. The Order of the Authority along with Revised Tariff Table (Annexure-I) and Debt Servicing Schedules (Annex-II & III) needs to be notified in the official gazette.

Enclosure: As above


14.04.16
(Syed Safer Hussain)

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

CC:

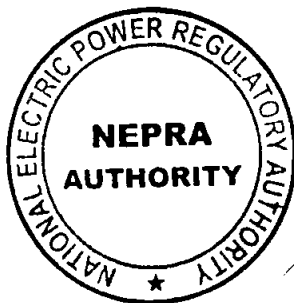
1. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad.
2. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad.



**DECISION OF THE AUTHORITY IN THE MATTER OF TARIFF ADJUSTMENT
AT COMMERCIAL OPERATION DATE OF 84 MW NEW BONG ESCAPE HYDROPOWER PROJECT-
LARAIB ENERGY LIMITED (LEL)**

1. **Background/Introduction of the case:**

- 1.1 Laraib Energy Limited (herein after referred to as "LEL", "the company") has established an 84 MW hydropower project in Azad Jammu & Kashmir. In terms of the provisions of Interim Power Procurement Regulations (2005), the Power Purchase Agreement (PPA) executed between Laraib Energy Limited and National Transmission and Despatch Company Limited (herein after referred to as "NTDCL" or "the petitioner"). Schedule 6 (Tariff, indexation and adjustment) of the said PPA was approved by NEPRA vide a decision dated December 14, 2009. The approved Schedule 6 of the PPA requires certain adjustments in the reference tariff of LEL at the commercial operations date (hereinafter referred to as "COD").
- 1.2 The hydropower project of LEL commenced commercial operations on March 23, 2013. NTDCL vide its letter no. GM/WPPO/CE-IV/DH/3927-31 dated April 24, 2014 submitted a request to the Authority for approval of tariff adjustments at COD.
- 1.3 The Authority directed NTDCL vide letter no. NEPRA/R/TRF-100-LARAIB/10301 dated September 08, 2014 to shortlist an audit firm, for necessary approval by the Authority, for the verification/audit of one-time adjustments, project cost, tariff table, debt repayment schedule, etc. of LEL. On request of NTDCL, BDO Ebrahim & Co., Chartered Accountants were approved by the Authority on November 05, 2014, for the audit/verification as detailed above. Report of BDO Ebrahim & Co., Chartered Accountants was submitted by NTDCL vide letter No GM/WPPO/NTDCL/11870 dated December 10, 2014.
- 1.4 The Authority after examining the report of BDO Ebrahim & Co., Chartered Accountants submitted by NTDCL, noted that the total project cost has not been verified. According to the Auditor's its scope of review was restricted to the extent of verification of costs claimed on account of onetime adjustments heads only. Accordingly, the report of BDO Ebrahim & Co., Chartered Accountants was not in accordance with their terms of reference as approved by the Authority, which required submission of schedule of audited/verified project cost, tariff table, debt repayment schedule, etc. It was also observed that required documentary evidences for the verification of project cost by the Authority were also pending with the petitioner. The Authority therefore, directed NTDCL to submit at the earliest the audit report in accordance with the Authority approved terms of reference.



1.5 Meanwhile, NTDCL vide letter no GM/WPPO/NTDCL/352-54 dated January 12, 2015 requested the Authority to allow interim relief before final decision of tariff adjustments at COD pending before the Authority. NTDCL submitted following reason for the request of interim tariff;

“Due to delay in COD tariff determination, the company has been holding back the punitive cash sweep right of the Lenders through waivers, the last of which expired on October 31, 2014. Though the company has applied for and is diligently pursuing further waiver extension, none has so far been granted. Therefore, the Company is under default and exposed to major financial risk of prepayment of excess debt (US\$ 10.95 million) through application of cash sweep under the Finance Documents.”

1.6 In the aforesaid request NTDCL further stated that:

“In lieu of the interim relief sought, the Company hereby undertakes that it will refund any excess amount that is determined to be refundable/payable by the Company after determination of the final NEPRA approved COD stage tariff...”

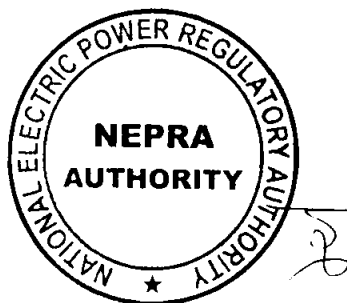
1.7 The Authority deliberated on the request for interim relief and observed that part of the delay is attributable to peculiar circumstances of case including jurisdiction issues, due to which LEL had to make its submissions through NTDCL, which follows its own procedures before forwarding to the Authority.

1.8 The Authority considered that the plant has been in operation for about two years and is delivering power to NTDCL. The Authority while keeping in view the financial implications of delay in the COD adjustment decision, granted an interim relief to LEL vide its decision dated March 04, 2015. The tariff granted through interim decision was applicable only for one year from the date of interim relief decision. The Authority further directed NTDCL to submit the audit report on total project costs claimed, etc. as per terms of reference already approved by the Authority.

1.9 The required audit report along with the engagement letter, as per the TORs issued by the Authority, has been later submitted by NTDCL vide letter No GM/WPPO/CE-III/DH/4219-20 dated Dec 01, 2015.

1.10 The petitioner in support of its request for tariff adjustment at COD, submitted various documents including;

- Engineering, procurement and construction contracts
- Agreements with the banks
- Certificate of commissioning from Independent Engineers
- Annual Audited Financial statements up to the year ended Dec, 2012



- Report of Auditors in respect of verification of project cost of LEL
- Relevant bank statements and advices
- EPC invoices, Payment challans of duties along with goods declaration, pay orders through which these duties were paid.
- Contracts and Invoices of Insurance during construction and after COD etc.
- Equity/debt drawdowns schedules along with the relevant bank statements
- Other relevant source documents and related schedules

2. **NTDCL's submissions on cost overruns claimed by LEL:**

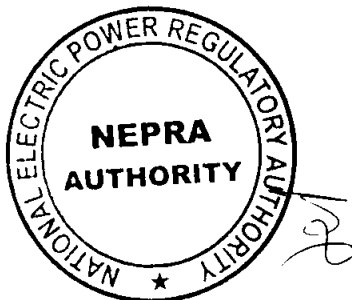
2.1 NTDCL in its request for tariff adjustment at COD of LEL has submitted that;

"The costs overruns of US \$ 12.87 million claimed by the company has not been verified by NTDC nor incorporated in its COD Tariff Petition for the New Bong Escape Hydropower Project being outside its scope or purview. However, the company is insistent that these cost overruns have occurred due to legitimate reasons and their claim should be forwarded to NEPRA for its decision. Their argument is that NBE, being the first hydropower IPP in Pakistan, did not have any benchmark or precedents to follow and hence the sponsor had not been able to anticipate certain legitimate project costs at the EPC Level stage."

2.2 NTDCL recommended total project cost of US\$ 225.21 million. Which is presented as follows:

Particulars	Project Cost		Tariff	
	US\$ (Million)	US\$ (Million)	(Rs /kWh)	(US cents /kWh)
Project cost and tariff as per PPA		214.85	6.8362	8.5453
Project cost and tariff as claimed by New Bong	235.29		9.1034	9.2797
Less: Costs Outside the scope of PPA	(12.87)			
Less: Costs could not be verified by NTDCL	(0.29)			
Add: Exchange gain	3.08			
Project cost and tariff recommended by NTDCL		225.21	8.7194	8.8882

2.3 Further, NTDCL has also reported various O&M costs during construction claimed by LEL which are not covered in PPA, such as (i) Funding of Debt Service Reserve Account, (ii) Monitoring cost of Lenders and (iii) Funding of annual recurring spare parts. However, NTDCL has not recommended the cost overruns and has sought the decision of Authority on these costs overruns.



2.4 The Authority after detailed deliberation on the project cost overruns and other various O & M cost overruns forwarded by NTDCL, have decided that these costs overruns being outside the scope of Power Purchase Agreement signed with power purchaser cannot be allowed. Further the scope of COD adjustment is restricted to the adjustment of costs which have been earlier considered and agreed between NTDC and LEL.

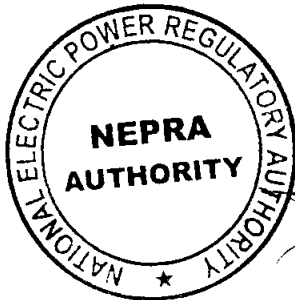
3. Component wise detail of project cost adjusted at COD:

After scrutiny of the documents/information submitted by NTDC, the Authority has decided to allow following adjustments in the reference tariff of LEL:

3.1 EPC Cost:

3.1.1 The reference engineering, procurement and construction (hereinafter referred to as "EPC") cost as per the PPA was US \$ 152.8 million at reference exchange rate parity of Rs.80/kWh. The approved Schedule 6 of PPA specifies that any variation in the total project cost during construction period on account of variation in US\$/Rupee parity shall be allowed through an adjustment in total project cost to allow for the full recovery of such costs; provided that no such adjustment shall be allowed after the Required Commercial Operations Date. For the purpose of such adjustment, the Company shall provide the Power Purchaser the payment schedule along with the exchange rates prevalent on the date of those transactions.

3.1.2 NTDC requested the Authority to allow LEL an EPC cost of US \$ 152.8 million and EPC cost Escalation of US \$ 7.157 million at the exchange rate of Rs. 98.10/US \$ prevailing on COD date i.e. March 23, 2013. NTDC in support of its claim has submitted copies of relevant documentary evidences i.e. EPC Contract, EPC commercial invoices, schedule of payment, bank statements etc. As per the documentary evidences provided by NTDC, EPC cost has been assessed by the Authority. Below is the comparison of EPC cost as per PPA, claimed by NTDC and assessed by the Authority based on the documentary evidences:



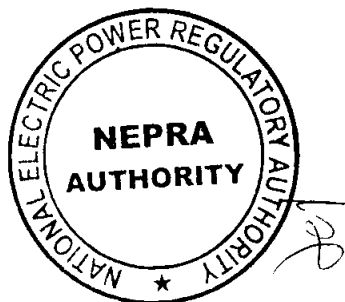


EPC Cost	Contractor	Contract Value		As per PPA	Claimed Cost	Assessed EPC Cost					
		US\$ portion (Million)	Rs portion (Million)	Total US\$ (Million)	US\$ (Million)	US\$ Paid portion paid to EPC contractor in US\$ (Million)	US\$ Portion paid to other vendors US \$ in (Million)	Rs portion Paid to EPC contractor Rs in (Million)	Total \$ Paid (Million)	Ex Rate	Total Rs. (Million)
Onshore EPC	Sambu Construction Company	29.60	3,094.20	152.80	152.80	29.15	0.45	3,094.20	64.62	88.53	5,720.75
Offshore EPC	Sambu Construction Company	85.00	-			85.00	-	-	85.00	88.92	7,557.94
Total		114.60	3,094.20			114.15	0.45	3,094.20	149.62	88.75	13,278.69

3.1.3 The EPC onshore contractor was Sambu Construction Company. However, certain post COD tasks such as security installation, rehabilitation of NBE gates, spare cylinders of FM 200 Gas, tools and equipment for erection, testing & commissioning work were not performed by Sambu. On query referred, the company was asked to explain the reason for this, LEL explained that it was mutually agreed between the EPC contractor and the company that the above mentioned tasks cannot be performed by the contractor due to certain factors including non-available work force and may be executed by employer through 3rd party contractor on behalf of the EPC contractor. LEL further submitted that the contractor vide its letters dated March 28, 2013 and September 12, 2013 had also allowed the company to deduct the expenditures incurred in this regard up to maximum of US \$ 0.45 million from the outstanding payment owed by the company to EPC contractor. Accordingly the same amount of US \$ 0.45 million was deducted by LEL. LEL requested the Authority to allow the cost for those pending work done by third part upto maximum US \$ 0.45 million being with in the limit of approved overall EPC cost.

3.1.4 LEL executed these tasks through different vendors. below is the summary of those tasks performed by different vendors;

S #	Vendors	Task Description	US \$ (Million)	Rs. (Million)
1.	Mechatronics	Security installation	0.148	14.685
2.	Mian Engineers	NBE Rehabilitation	0.144	14.535
3.	NAFCO	FM-200 Gas Cost, custom duty , insurance	0.119	12.371
4.	Ashraf Industries	Workshop Equipment	0.008	0.893
5.	H.S Ahmad Ally	Workshop Equipment	0.0008	0.079
6.	Care Enterprise	Workshop Equipment	0.013	1.333
7.	KM Enterprise	Workshop Equipment	0.072	7.571
	Total		0.504	51.413





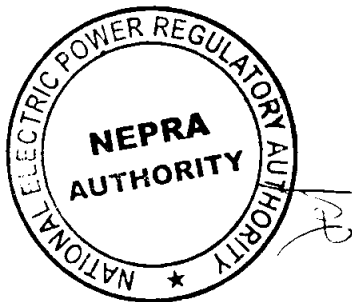
- 3.1.5 LEL in support of the tasks performed by third party has submitted the copies of agreement, invoices, payment evidences.
- 3.1.6 The Authority after deliberation has decided to allow the portion of EPC work i.e. US \$ 0.45 million (Rs. 45.48 million) performed by the third party being within the agreed and approved EPC cost.
- 3.1.7 For the purposes of adjustment of EPC contracts cost, actual weighted average Rs. / US \$ parity works out to Rs. 88.75.US \$. Accordingly, in view above, after allowing exchange rates fluctuations, the EPC contracts cost of LEL works out to US \$ 149.62 million (Rs. 13,278.69 million) which is accepted and approved as such.

3.2 EPC Cost Escalation:

- 3.2.1 The approved Schedule 6 to PPA provides adjustment of EPC civil work cost due to the escalation in the prices of cement, steel, fuel, labour. NTDCL has requested the Authority to allow LEL an EPC cost Escalation of US \$ 7.157 million at the exchange rate of Rs. 98.10/US \$ prevailing on COD date i.e. March 23, 2013.
- 3.2.2 The source of indices for cement, steel, fuel, labour was given in Table 11.12 related to Index Number of Wholesale Prices by Commodities, of the Monthly Bulletin of Statistics officially, Published by the Federal Bureau of Statistics, Statistics Division, Ministry of Finance, Government of Pakistan were as under:

Commodities	Source of Indices
Cement	Building Materials
Steel	Iron Bars and Sheets
Fuel	Fuel, Lighting and Lubricants
Local Labour	Mason (raj) for the city of "Rawalpindi" as given under Intercity Price of construction Input Items and Labour

- 3.2.3 Below is the brief description of relevant indices used for calculation as indicated by the Federal Bureau of Statistics;



Commodities	Source as per PPA	Source used with Base year 2000-01 from Jan-10 till July-11	Source used with Base year 2007-08 from Aug 11- December -12
Cement	Building Materials	Building Materials	Building Materials
Steel	Iron Bars and Sheets	Iron Bars and Sheets	Steel Bar and Sheets
Fuel	Fuel, Lighting and Lubricants	Diesel Oil	Diesel Oil
Local Labour	Mason (raj) for the city of "Rawalpindi" as given under Intercity Price of construction Input Items and Labour	Mason (raj) for the city of "Rawalpindi" as given under Intercity Price of construction Input Items and Labour	Mason (raj) for the city of "Rawalpindi" as given under Intercity Price of construction Input Items and Labour

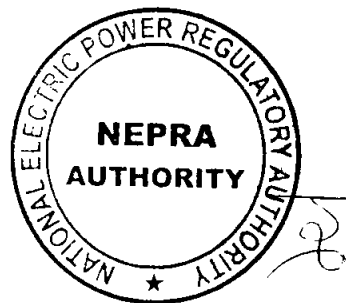
3.2.4 NTDCL, in support of its request submitted revised monthly prices of civil works components published by Federal Bureau of Statistics, applicable during the construction period and payment evidences such as bank statements etc.

3.2.5 As per the documentary evidences provided the actual EPC cost escalation of US \$ 7.156 million (Rs. 631.946 million) has been assessed and allowed.

3.3 Custom Duties:

3.3.1 LEL was allowed Custom Duties of US \$ 4 million as per the approved Schedule 6 of PPA which was required to be adjusted at COD as per actual. NTDCL has requested to allow the Custom Duties of US \$ 5.411 million to LEL at the exchange rate of Rs. 98.10/US \$ prevailing on COD date i.e. March 23, 2013. NTDCL in support of its requested claim have submitted the copies of goods declaration, bank statement, duties payment challan, bill of lading etc. BDO Ebrahim & Co provided following reconciliation of duties and taxes with the EPC cost:

	US \$ (Million)	PKR (Million)
Value of Machinery as per EPC	85.000	7,742.572
Generator Monitoring System (Overruns)	0.524	49.296
	85.524	7,791.868
Custom Duties @ 5%	4.359	389.632
Excise Duty @ 1%/2.5%	0.320	27.242
Sindh sales tax @ 0.85%	0.734	65.501
Total Duties Paid	5.413	482.375



3.3.2 The Authority directed LEL to explain that whether the FED claim is adjustable or not as per the laws prevailing in AJ & K. LEL in response submitted the opinion of their tax advisor's KPMG Taseer Hadi and Co. which states that;

"In terms of section 3 (A) of the FE Act, SED is charged and collected on goods produced in Pakistan and goods imported into Pakistan at the rate of 1% of value of such goods. The rate was enhanced to 2.5% with effect from March 2011.

Section 3(A) was omitted through the Finance Act, 2011 earlier it was inserted through the Finance Act, 2007.

Please note that under Serial No. 11 of the Table to the SRO 655(1)/2007 dated 29 June 2007 [the SRO], production of electricity energy is exempt from the levy of SED. Further under the SRO, SED paid on industrial input, at time of import or local supply, is only adjustable against the SED chargeable on local supply of goods manufactured therefrom. Further, adjustment of SED is not allowed against Federal Excise Duty, Sales Tax or any other tax and vice versa.

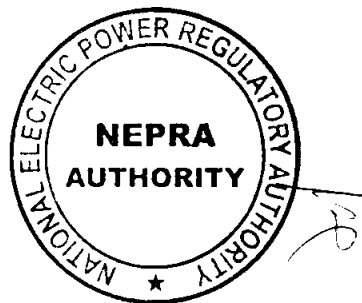
We understand that since the electricity supplied by the company during the period was exempt from levy of SED therefore, the company was not entitled to claim adjustment of SED paid at the time of import during the Period against its federal excise duty and sales tax liabilities."

3.3.3 The Authority considered LEL's tax advisors opinion on FED claim. The Authority also noted that the FED has been allowed earlier also to other IPPs due to the similar reason. The same treatment is being given in the instant case.

3.3.4 Based on the documentary evidences the Authority noted that duties of US \$ 0.028 million has been paid for EPC cost overruns of US \$ 0.523 million which being outside the scope of COD adjustment is not considered. The duties and taxes other than the aforesaid have been verified to the tune of Rs. 452.624 million (US \$ 5.385 million) which are being allowed.

3.4 Interest during construction:

3.4.1 Interest during construction (IDC) allowed to Laraib Energy Limited as per the approved Schedule 6 of PPA was US \$ 19.727 million which was allowed to be adjusted at COD as per actual. NTDC has requested the Authority to allow IDC of US \$ 20.403 million to LEL at the exchange rate of Rs. 98.10/US \$ prevailing on COD date i.e. March 23, 2013 and has submitted copies of financing



agreements with the lenders, copies of bank statements to substantiate actual drawdowns of debt along with bank advices evidencing the amount of interest charged by the lenders, data of KIBOR rates, LIBOR rates etc. to substantiate its claim.

- 3.4.2 The Authority has observed that the Power Purchase Agreement (PPA) of LEL defines construction start date as follows:

"Construction Start Date: Means the issuance of the "notice to proceed" by the company to the construction contractor and the unconditional release by the company to the construction contractor of funds equaling eight percent (8%) or more of the total capital cost of the project."

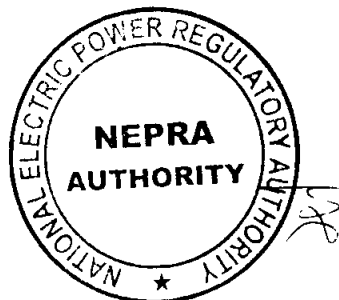
- 3.4.3 The Authority observed that as per the above definition "Notice to proceed" was given to the EPC contractor by LEL on December 29, 2009 and 8% of the total capital cost of the project was paid to the construction contractor on January 04, 2010. Accordingly, the construction start date in the instant case is considered January 04, 2010 for the calculation of IDC.

- 3.4.4 The Authority has also noted that PPA of LEL, defines its required commercial operations date (hereinafter referred to as "RCOD") as follows:

"The date which is forty two (42) months after the date of financial closing, which date may be extended in accordance with the terms of this agreement, including as a result of force majeure event, delays in testing pursuant to section 10.1(b) hereof or in energizing and commissioning of the interconnection and transmission facilities pursuant to section 3.6 hereof or due to non-availability of water within technical limits."

- 3.4.5 The Authority observed that the Financial close was achieved by LEL on December 2, 2009 under the provisions of the Implementation Agreement which is acknowledged by Private Power Infrastructure Board vide letter No C(C02) PPIB-NB/LGL dated December 7, 2009.

- 3.4.6 The Authority further noted that Independent Engineer "URS" were appointed by LEL as per the requirement of PPA who issued certificate of commissioning of the complex on March 22, 2013. Furthermore, NTDC vide its letter no. GM/WPPO/CE-IV/DH/3478-87 dated April 16, 2013 has also confirmed that LEL has achieved COD on March 23, 2013.



- 3.4.7 The Authority, keeping in view the construction start date and required COD as defined in PPA, has decided to allow the IDC for the construction period from January 04, 2010 to March 23, 2013.
- 3.4.8 The Authority furthermore observed that LEL has earned mark-up income amounting to US \$ 0.775 million which is attributable to the construction period allowed by the Authority. For fair and consistent treatment, the Authority has decided to deduct this income from IDC.
- 3.4.9 The Authority has also noted that BDO Ebrahim & Co has expressed their unqualified opinion and the IDC verified by the Auditors is US \$ 20.448 million net of interest income. Though, BDO in working of the aforesaid amounts, have not restricted interest income to construction period.
- 3.4.10 In the light of above, IDC for construction period works out to be US \$20.441 million (Rs. 1,890.434 million) net of interest income of US \$ 0.775 million (Rs.67.949 million) for the allowed construction period. After restricting the amount of IDC upto assessed debt (i.e. US \$161.247 million), the amount of IDC works out to US \$ 19.063 million (Rs. 1,763.082 million) which is hereby allowed by the Authority.

3.5 Land Resettlement/Acquisition:

- 3.5.1 Land resettlement/acquisition allowed to LEL as per the approved Schedule 6 of PPA was US \$ 1.583 million (Rs. 126.64 million) for land resettlement/acquisition, which was required to be adjusted on account of actual variation in land resettlement/acquisition cost at COD.
- 3.5.2 NTDCL has requested to allow the land resettlement/acquisition cost of US \$ 1.726 million at the exchange rate of Rs. 98.10/US \$ prevailing on COD date i.e. March 23, 2013.
- 3.5.3 The total cost on account of land resettlement/acquisition as verified by the independent Auditors is US \$ 1.737 million with the following qualifications:

“(i) We noted that land resettlement /acquisition includes an amount of US \$ 157,656 which has been paid for future period on account of project land lease rentals. We understand from management that since these payments were made upfront under the covenants of the land lease agreements for acquiring of the project land, hence are of capital nature and therefore should be allowed as part of the land resettlements costs. This amount is included in the eligible costs as onetime adjustments and accounted for in the computation of tariff table. This is also reflected in NTDCL petition to NEPRA dated April 24, 2014.



(iii) We have noted that land resettlement /acquisition includes payments in respect to legal fee for land litigation cases, consultancy charges to community representative appointed to deal with land resettlement issues, and construction of surat siphon and filling of low lying areas to conclude various land related settlements with the local community. As per management these are allowable cost under the PPA and are also reflected in NTDC petition dated April 24, 2014”

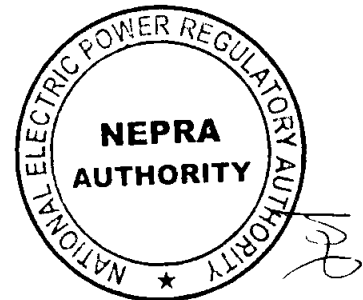
3.5.4 Following breakup of land resettlement/acquisition costs was provided in support of their claim;

Land Resettlement/acquisition Cost (Regrouping)	Cost Detail	
	US \$ (Million)	Rs. (Million)
Land Compensation	1.104	70.835
Legal & Professional costs for land litigation cases	0.018	1.678
Land lease Rentals	0.320	26.619
Filling of low lying areas	0.004	0.384
Tree Plantation- Hamza Nursery	0.055	5.290
Tree Plantation- Compensation paid to Gov AJK	0.017	1.386
Site office construction	0.021	1.277
Land survey	0.001	0.096
Construction cost of Surat Siphon Nallah	0.104	10.000
Construction of protection dyke	0.004	0.400
Community liaison officer	0.062	5.499
Total	1.711	123.464

3.5.5 The Authority after deliberation on the claimed cost for land resettlement and acquisition has observed that Land lease for an amount of US \$ 0.157 million has been paid upfront under the covenants of the land lease agreements for acquiring the project land, therefore accordingly allowed as part of cost for the project.

3.5.6 The Authority also noted that certain costs have been claimed under this head which do not pertain to the land resettlement/acquisition but are incurred for the project. Therefore, are being considered in the relevant cost head as tabulated below:

~~_____~~



Description of claimed cost	US \$ million	Rs. Million	Relevant cost head
Payment to advocate for supervisory services	0.006	0.561	Owner's administration
Payment to community liaison officer	0.061	5.499	Owner's administration
Site office construction cost	0.021	1.277	Staff colony
Land survey cost	0.001	0.096	Feasibility study
Total	0.089	7.433	

3.5.7 The other costs including the amount claimed for surat siphon nallah constructed way ahead in tailrace channel as community service and the amount paid to locals that were not legal occupant to that land have not been considered as part of land resettlement/acquisition.

3.5.8 Accordingly the total cost for land resettlement/acquisition has been as Rs. 104.033 million (US \$ 1.494 million).

3.6 Letter of Credit:

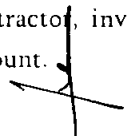
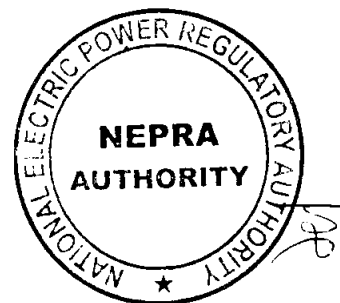
3.6.1 LEL was allowed US \$ 1.25 million (Rs. 100 million) for LC charges as per approved Schedule 6 of PPA. NTDCL in its request for the COD adjustment of LEL recommended to allow LEL, US \$ 1.25 million on account of LC charges. BDO Ebrahim and Co has also verified this cost with no adverse qualifications.

3.6.2 The Authority has observed that LEL did not open any LC, however, US \$ 1.25 million has been paid to the EPC contractor as per the clause 14. 8 of offshore contract which reads as follows;

“ No later than 365 days after the commencement date, the employer shall, in addition to the contract price pay to the offshore supplier:

(a) US \$ 1.25 million as full and final liability towards the costs of the letter of credit to be issued by the offshore supplier in favour of the electrical and mechanical equipment supplier”

3.6.3 In support of its claim LEL has submitted the copy of EPC contract, Copies of LCs opened by EPC contractor, invoice raised by offshore contractor, payment evidence (bank statement), for the said amount.

3.6.4 Since the cost has been incurred for the purpose it was allowed and agreed between EPC contractor and the company; therefore, US \$ 1.25 million (Rs. 107.375 million) amount claimed on account of letter of credit charges is hereby approved.

3.7 Insurance during construction:

3.7.1 The Insurance during construction cost allowed to LEL as per the approved Schedule 6 of PPA was US \$ 3.707 million (Rs. 296.56 million) at reference exchange rate parity of Rs.80/kWh. NTDC in its request for COD adjustment of LEL requested to allow US \$ 3.707 million at the exchange rate of Rs. 98.10/US \$ prevailing on COD date i.e. March 23, 2013. Copies of insurance policies, premium payment receipt, bank statements etc. were submitted in support of the claimed insurance cost.

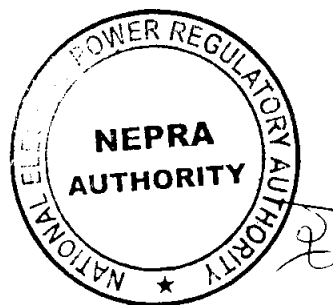
3.7.2 BDO Ebrahim and Co have verified US \$ 3.781 million for insurance during construction out of which US \$ 0.094 million does not pertain to the construction period as per PPA.

3.7.3 The Authority has decided to allow insurance cost only pertaining to the construction period. Based on the documentary evidence, and in line with decisions enumerated above, the insurance during construction works out as US \$ 3.687 million (Rs. 318.760 million) which is being allowed.

3.8 Lenders Fee and Lenders Advisors & Agents:

3.8.1 LEL was allowed lenders fee and lenders advisor & agents of US \$ 4.17 million and US \$ 4.59 million respectively as per the Approved Schedule 6 of PPA. NTDC vide its request for COD adjustment of LEL has requested to allow lenders fee of US \$ 4.17 million and lenders advisor & agents of US \$ 4.59 million at the exchange rate of Rs. 98.10/US \$ prevailing on COD date i.e. March 23, 2013. Copies of related documents including agreements/contracts, invoices, bank statements were provided in support of its claim.

3.8.2 The Authority has observed that the cost for lenders fee, lenders advisors and agents agreed between NTDC and LEL as per approved Schedule 6 of PPA is 6.26% of Capex loan, whereas, the Authority had not allowed financial charges above 3% of Capex loan to any other Hydropower project (HPP). The Authority considers that allowing 6.26% financial charges on CAPEX will tantamount to discrimination. In view thereof on the principle of equity, fairness and justice financial charges are being allowed within the established benchmark of 3% that includes lenders fee and lenders advisors and agents cost. Accordingly in the instant case US \$ 4.311 million (Rs. 378.030 million) is being assessed.



3.9 Other Project Cost Heads:

- 3.9.1 The other project cost for feasibility, Old Bong Escape repair and foot bridge, O & M mobilization, staff colony, construction supervision, owner advisors and owner admin was US \$ 23.024 million at reference exchange rate parity of Rs. 80/US \$ as per the approved schedule 6 of PPA.
- 3.9.2 NTDCL, in its request for the tariff adjustment of LEL at COD, requested to allow US \$ 23.024 for above mentioned cost heads at the exchange rate prevailing on COD date i.e. March 23, 2013. In support of the claim, copies of agreement, invoices, and payment details were submitted.
- 3.9.3 The Authority considered the cost incurred in various sub heads and components referred above and noted that LEL incurred cost overruns in some heads and had savings in certain other project cost heads, the Authority therefore allowed aggregate cost for other project cost heads amounting to US \$ 23.025 million (Rs. 1907.948 million).

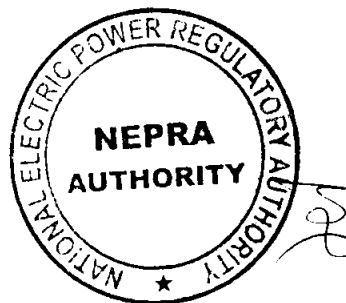
3.10 Exchange Loss:

- 3.10.1 NTDCL has recommended to allow US \$ 0.973 million for the exchange loss to LEL. Exchange loss is basically the excess amount that Laraib Energy Limited had to pay due to the exchange rate variation. As per LEL, exchange loss is computed by translating project inflows (funding) and outflows (project costs) into equivalent US dollars at the prevailing exchange rate on the date of each transaction.
- 3.10.2 NTDCL while referring to clause 3 of Annex V of schedule to PPA has submitted that:

"An amount of US \$ 972,774 has been claimed by the company which has been agreed to pursuant to clause 3 of Annex V of approved Schedule 6 to PPA."

- 3.10.3 BDO Ebrahim and Co Chartered Accountants have verified an amount of US \$ 0.410 million for the exchange loss with following remarks:

"We noted that an amount of US \$972,774 was claimed as exchange loss on account of US \$/Rupee parity pursuant to clause 3 (adjustment in total project cost due to variation in US \$/Rupee parity) of Annex V (one-time adjustments) of approved Schedule 6 to the PPA. This exchange loss has been computed by translating project inflows (funding) and outflows (project costs) into equivalent US dollars at the exchange rate prevailing on the date of each transaction, and is the difference in the closing balance as per the working based on ledger account and the balance appearing in the bank statements, translated into equivalent



US \$ using the exchange rate prevalent on the last day of the construction period i.e. march 22, 2013. As per the management this is allowable pursuant to para 3 of annexure V of approved Schedule 6 to the PPA. The difference of US \$ 562,546, which is considered 'not eligible cost as one-time adjustment', represents the exchange loss pertaining to the periods prior to start of the construction period which is outside the scope of the onetime adjustments and accordingly also not included in the computation of tariff table, which was also agreed by the company"

3.10.4 The clause 3 of Annex V of Approved Schedule 6 of the PPA states that;

"Any variation in the total project cost during construction period on account of variation in US \$/Rupee parity shall be allowed through an adjustment in total project cost to allow for the full recovery of such costs; provided that no such adjustment shall be allowed after the Required Commercial Operations Date. For the purpose of such adjustment, the company shall provide the power purchaser the payment schedule along with the exchange rate prevalent on the date of particular transaction. The relevant component of reference tariff set out in Annex-I shall be revised on the commercial operations date to incorporate the additional costs related to change in the US \$/Rupee rate during construction period."

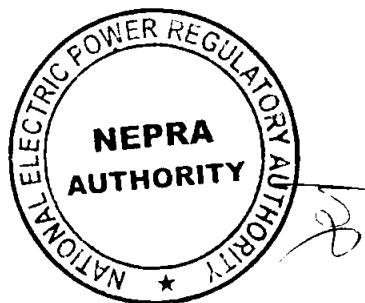
3.10.5 The Authority as per the above referred clause has already allowed the total project cost along with the US \$/Rupee parity. Therefore, the Authority has decided that claiming separate cost for exchange loss is no further relevant when already accounted for.

3.11 Summary of Adjustments in Project Cost:

3.11.1 The reference project cost of LEL was US \$ 214.848 million (Rs. 17,187.84 million). NTDC has requested to allow project cost of US \$ 225.209 million (Rs. 22,093 million) at the COD stage. Based on decisions in the preceding paragraphs, the overall project cost allowed to LEL, works out to US \$ 214.996 million (Rs. 18,942.488 million). The Authority, further noted that the actual debt: equity ratio is 75:25, which is same as was allowed earlier. The Authority has accordingly decided to allow debt equity ratio of 75:25 to LEL.

3.12 Water Use Charges (WUC):

3.12.1 The reference WUC component as per the approved Schedule 6 of PPA was Rs. 0.1500/kWh, which is a fixed component for all the hydropower IPPs at the time of COD and is subject to annual indexation, the first such adjustment is required to be made after one year of COD for all Hydropower IPPs.



NTDCL has requested to allow indexed water use charge component of Rs. 0.2704/kWh instead of fixed component of Rs 0.1500/kWh at COD to LEL. The Authority has noticed that LEL has made payment to Government of AJK at Rs. 0.1500/kWh for water use w.e.f. May, 2013 i.e. after COD, therefore, claiming indexation on water use charges at the COD is not advisable. The Authority therefore has decided to allow water use charges component of Rs. 0.1500/kWh to LEL at COD that will be subject to annual indexation.

3.13 Indexations of O&M:

3.13.1 Based on indexation formulas as per the Approved Schedule 6 of PPA, and in the light of earlier decisions of the Authority, regarding replacement of WPI (Manufactures) with CPI - General, the revised O & M tariff components along with revised values against the reference O & M tariff components and their reference values are as follows:

O&M component	Year 1-25		
	Variable O & M	Fixed O & M	
		Local	Foreign
Reference (Rs/kWh)	0.0249	0.3389	0.3267
Revised O & M at COD (Rs/kWh)	0.0441	0.4410	0.5786

Particulars	Index Number	Month
Reference Values:		
Pakistani WPI (Manufacturer)	138.810	March 2009
US CPI	212.709	March 2009
Exchange rate (PKR/US\$)	80	Reference Ex. Rate
Revised Values:		
Pakistani WPI (Manufacturer)	215.85	Average April 2011-June 2011
Local CPI (General)	151.70	Average April 2011-June 2011
Local CPI (General)	172.78	Average Oct 2012 to Dec 2012
US CPI	230.38	Average Oct 2012 to Dec 2012
Exchange rate (US\$/ PKR)	96.13	Average Oct 2012 to Dec 2012

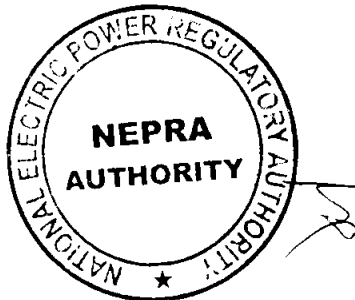


3.14 Insurance During Operations:

- 3.14.1 The reference insurance component as per the approved Schedule 6 of PPA was Rs. 0.2601/kWh calculated on US \$ 1.528 million (i.e. 1% of reference EPC cost).
- 3.14.2 NTDCL has requested to allow insurance component of Rs. 0.2370/kWh to LEL based on insurance premium of US \$ 1.159 million as per the insurance policies. In support of its claim, the relevant documents submitted include; copies of insurance policies, premium payment receipt, bank statements, WHT challans etc.
- 3.14.3 As per the submitted details and documentary evidences, it is noted that the total paid insurance premium is Rs. 118.735 million (US \$ 1.158 million). Accordingly the insurance component works out to Rs. 0.2526/kWh which is hereby allowed.
- 3.14.4 Further, the Authority noted that the PPA provided quarterly indexation/adjustment of insurance component w.r.t exchange rate variation which is inconsistent with the insurance adjustment mechanism for other IPPs which is adjusted as per actual upto maximum 1% of EPC cost without any provision for quarterly adjustment/indexation w.r.t exchange rate variation. Therefore, the Authority has decided to have the insurance adjustment mechanism consistent with other IPPs. Insurance component of LEL will be adjusted annually, on the basis of actual expenditure, not exceeding 1% of the approved EPC cost, upon production of authentic documentary evidence by LEL for verification.

3.15 Return on Equity (ROE), Special Return On Equity (SROE) and Return on Equity During Construction (ROEDC):

- 3.15.1 LEL was allowed 17% Return on Equity as per the approved Schedule 6 of the PPA. As per LEL US \$ 59.07 million (Rs. 3,977.70 million) has been injected as equity. In support of equity injections LEL has submitted the bank statement, SECP's documents regarding share conversion and audited accounts from 1993-2013. The Authority noticed that US \$ 0.82 million (Rs. 80.40 million) were injected by the sponsor as a subordinated loan. On inquiring LEL informed that the above mentioned loan has been repaid, therefore it has not been considered as equity. The total equity injected is US \$ 58.25 million (Rs. 3,897.30 million). As the debt to equity ratio of 75:25 has been allowed by the Authority accordingly, the allowed equity as per allowed proportion works out to US \$ 53.749 million.

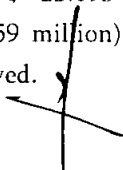


ROE:

- 3.15.2 The reference return on equity (hereinafter referred to as "ROE") component of LEL was Rs. 1.7296/kWh. NTDC has requested to allow Rs. 2.1741/kWh at the COD stage. The tariff components were subject to adjustment, accordingly ROE was subject to adjustment on the basis of revised amount of equity allowed by the Authority and variation in exchange rate parity between US\$/PKR.
- 3.15.3 As the project is on BOOT basis, ROE @ 17% on the basis of revised equity and revised exchange rate at COD i.e. Rs. 96.13/US \$ (average ex rate of quarter preceding COD) for first 13 years of the project works out to US \$ 9.137 million (Rs. 878.339 million), accordingly the component of ROE for first 13 years works out to Rs. 1.8688/kWh and from 14 year onward it works out to US \$ 10.501 million (Rs. 1,009.458 million), with the component of ROE from 14 year onward as Rs. 2.1478/kWh, which is hereby allowed accordingly.

SROE:

- 3.15.4 The reference SROE component of LEL was Rs. 0.6080/kWh which was pursuant to ECC's decision dated June 26, 2009, wherein it was referred that "For the projects under 1995 Hydel policy (i.e. New Bong and Rajhdani Hydropower project), the period for IRR calculation will be from 2004". NTDC has requested to allow SROE component of Rs. 0.7456/kWh to LEL. The tariff components of SROE was subject to adjustment on the basis of revised amount of equity allowed by the Authority and variation in exchange rate parity between US\$/PKR. The equity injected before construction start date is US \$ 23.193 million (Rs. 2,229.460 million) and the allowed equity before construction start date is US\$ 21.400 million (Rs. 2,057.177 million).
- 3.15.5 Accordingly, SROE calculated on equity injected before construction start date i.e. on US \$ 23.193 million (Rs. 2,229.460 million) from PPA signing date i.e. 2004 till construction start date works out to be US \$ 12.657 million (Rs. 1,216.679 million). The SROE after prorating to allowed equity (US\$ 21.400 million i.e. Rs. 2,057.177 million) before construction start as compared to actual equity (US \$ 23.193 million i.e. Rs. 2,229.460 million) works out to US \$ 11.679 million (Rs. 1,122.659 million). Accordingly the SROE component works out as Rs. 0.4142/kWh, which is hereby allowed.



ROEDC:

3.15.6 The reference ROEDC component was Rs. 0.6868/kWh. NTDCL has requested to allow Rs. 1.0274/kWh as ROEDC component to LEL at COD stage. As per the practice the Return on Equity during construction (ROEDC) is adjusted at COD on the basis of actual equity injections, within the overall equity proportion allowed by the Authority.

3.15.7 Accordingly, the ROEDC works out to US \$ 36.608 million (Rs. 3,519.048 million). After prorating ROEDC upto actual equity allowed i.e. US \$ 53.749 million (Rs. 5,166.689 million) at COD, the amount of ROEDC works out US \$ 33.779 million (Rs. 3,247.111 million). Accordingly, the component of ROEDC works out as Rs. 1.1981/kWh which is hereby allowed.

3.16 Debt Servicing Component:

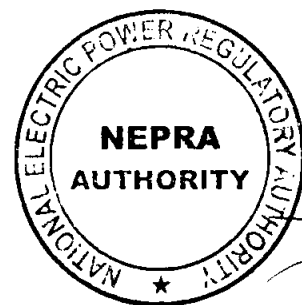
3.16.1 The reference foreign levelized debt service component was Rs. 2.1537/kWh and reference local levelized debt service component was Rs. 0.5577/kWh. NTDCL has requested to allow foreign levelized debt service component of Rs. 2.3741/kWh and local levelized debt service component of Rs. 0.7974/kWh at the COD stage to LEL.

3.16.2 Based on the project cost of US \$ 214.996 million (Rs. 18,942.488 million) allowed by the Authority at COD, debt @ 75% of the project cost works out to US \$ 161.247 million (Rs. 14,206.866 million) million. Against this allowed 75% debt, the actual foreign and local debt composition is 79:21. Accordingly, the revised levelized foreign debt service component on the basis of, of 6 months LIBOR of 0.4479 % +4.75% margin works out to Rs. 2.2615 per kWh and the revised levelized local debt service component on the basis of 6 months KIBOR of 9.57 % +3.25% margin works out to Rs. 0.5417 per kWh which is hereby allowed.

4. ORDER

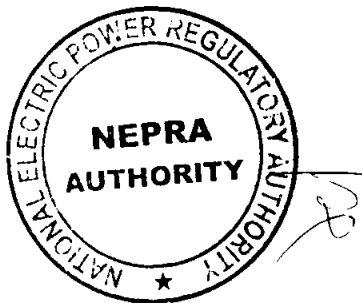
Pursuant to sub section (4) of Section of Regulation of Generation, Transmission and Distribution of Electric Power Act 1997, the power purchaser is allowed to procure electricity from LEL as per the following specified/approved tariff:

~~Y~~



Tariff Components	Year 01-09 Rs./kWh	Year 10-12 Rs./kWh	Year 13-25 Rs./kWh	Indexation
Variable Energy Purchase Price (VEPP)				
WUC	0.1500	0.1500	0.1500	CPI-General
Variable O & M-Local	0.0441	0.0441	0.0441	CPI – General
Fixed Energy Purchase Price (FEPP)				
Fixed O & M-Foreign	0.4410	0.4410	0.4410	PKR/US\$, US CPI
Fixed O & M-Local	0.5786	0.5786	0.5786	CPI – General
Insurance	0.2526	0.2526	0.2526	PKR/US\$
Return on equity (ROE)	1.8688	1.8688	2.1478	PKR/US\$
Special return on equity (SROE)	0.4142	0.4142	0.4142	PKR/US\$
Return on equity during construction (ROEDC)	1.1981	1.1981	1.1981	PKR/US\$
Debt service-Foreign	As per Annex-II		-	LIBOR, PKR/US\$
Debt service-Local	As per Annex-III	-	-	KIBOR

- i. The reference tariff has been calculated on the basis of net annual production of 470 GWh.
- ii. The reference PKR/Dollar rate has been assumed at 96.13.
- iii. The above tariff is applicable for a period of twenty (25) years commencing from the date of the COD.
- iv. Debt service will be paid in the first 12 years of commercial operation of plant after COD.
- v. Redemption of equity has been allowed after 12 years of commercial operation of the plant
- vi. The component wise tariff is indicated at Annex-I.
- vii. Foreign Debt Servicing Schedule is attached as Annex-II.
- viii. Local Debt Servicing Schedule is attached as Annex-III.



The following indexations shall be applicable to the reference tariff;

I. Pass-Through Items

No provision for income tax has been accounted for in the tariff. If the power producer is obligated to pay any tax, the exact amount paid by the power producer (the company) shall be reimbursed by the power purchaser to the company on production of original evidences & receipts. This payment shall be considered as pass-through payment (Rs./kWh) spread over a 12 months period in addition to fixed charges proposed in the Reference Tariff. Furthermore, in such a scenario, the company may also submit to the power purchaser the details of any tax shield savings and the power purchaser will deduct the amount of these savings from its payment to the company on account of taxation.

Withholding tax on dividend is also a pass through item just like other taxes as indicated in the government guidelines. The power purchaser shall make payment on account of withholding tax at the time of actual payment of dividend subject to maximum of 7.5% of 17% return on equity (including return on equity during construction and special return on equity) according to the following formula:

Withholding Tax Payable	=	$[(17\% * (E_{(Ref)} - E_{(Red)}) + ROEDC_{(Ref)} + SROE_{(Ref)}) \times 7.5\%]$
Where:		
$E_{(Ref)}$	=	The reference equity.
$E_{(Red)}$	=	Equity Redeemed.
$ROEDC_{(Ref)}$	=	The reference return on equity during construction.
$SROE_{(Ref)}$	=	The reference special return on equity.

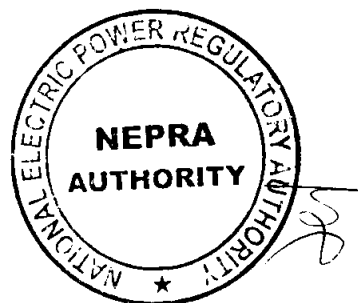
In case the company does not declare a dividend in a particular year or only declares a partial dividend, then the difference in the withholding tax amount (between what is paid in that year and the total entitlement as per the Net Return on Equity) would be carried forward and accumulated so that the company is able to recover the same as a pass through from the Power Purchaser in future on the basis of the total dividend payout.

II. Indexations:

The following indexation shall be applicable to the reference tariff;

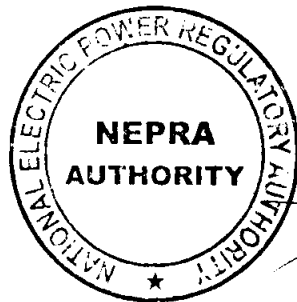
i. Indexation applicable to O&M:

The local part of O&M cost will be adjusted on account of Inflation (CPI-General) and O&M foreign will be adjusted on account of variation in Rupee/Dollar exchange rate and US CPI. Quarterly Adjustment for local inflation, foreign inflation and exchange rate variation will be



made on 1st July, 1st October, 1st January & 1st April respectively on the basis of latest available information with respect to CPI - General (notified by the Pakistan Bureau of Statistics), US CPI (notified by US bureau of labor statistics) and revised TT & OD Selling rate of US Dollar as notified by the National Bank of Pakistan. The mode of indexation will be as follows:

$V O\&M_{(L,REV)}$	=	$VO\&M_{(L,REF)} * CPI-G_{(REV)} / 151.70$
$F O\&M_{(L,REV)}$	=	$FO\&M_{(L,REF)} * CPI-G_{(REV)} / 151.70$
$F O\&M_{(F,REV)}$	=	$FO\&M_{(F,REF)} * US CPI_{(REV)} / 230.38 * ER_{(REV)} / 96.13$
Where:		
$V O\&M_{(L,REV)}$	=	The revised applicable Variable O&M local component of the Variable Charges indexed with CPI – General
$F O\&M_{(L,REV)}$	=	The revised applicable Fixed O&M local component of the Fixed Charges indexed with CPI – General
$F O\&M_{(F,REV)}$	=	The revised applicable Fixed O&M foreign component of the Fixed Charges indexed with US CPI and currency variation
$V O\&M_{(L,REF)}$	=	0.0441, The reference Variable O&M local component of the Variable Charges for the relevant period
$F O\&M_{(L,REF)}$	=	0.5786, The reference fixed O&M local component of the Fixed Charges for the relevant period
$FO\&M_{(F,REF)}$	=	0.4410, The reference fixed O&M foreign component of the Fixed Charges for the relevant period
$CPI - G_{(REV)}$	=	The Revised average Consumer Price Index (General) i.e. the average of the end of months values for the CPI-General notified by Pakistan Bureau of Labor Statistics of the quarter immediately preceding the relevant quarter. (If any such values are not available then the average of the end of month values for the most recent three (03) months shall be used.)
$CPI - G_{(REF)}$	=	172.78, Reference Average Consumer Price Index (General) for the quarter Oct 2012 to December 2012 as notified by the Pakistan Bureau of Statistics
$US CPI_{(REV)}$	=	The Revised average US Consumer Price Index (All Urban Consumers) i.e. the average of the end of months values for the US-CPI notified by US Bureau of Labor Statistics of the quarter immediately preceding the relevant quarter. (If any such values are not available then the average of the end of month values for the most recent three (03) months shall be used.)
$US CPI_{(REF)}$	=	230.38, Reference Average US CPI for the quarter Oct 2012 to December 2012 as notified by the US Bureau of Labor Statistics (All Urban Consumers).



ER _(REV)	=	The Revised average TT & OD selling rate of US dollar for each Wednesday for the quarter immediately preceding the relevant quarter as notified by the National Bank of Pakistan
ER _(REF)	=	Rs. 96.13/US \$ the reference average exchange rate of each Wednesday of the quarter Oct 2012 to December 2012

ii. Indexation for Water Use charges:

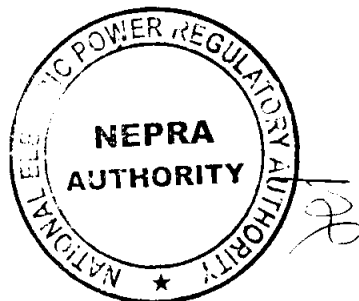
Water use charges will be paid on units delivered basis and will be indexed with CPI-General annually from the date of COD. The first such adjustment shall be due after one year of commercial operation date, according to the formula;

WUC _(REV)	=	Rs. 0.1500/kWh * CPI-General _(REV) /CPI-General _(REF)
Where:		
CPI _(REV)	=	The Revised average Consumer Price Index (General) i.e. the average of the end of months values for the CPI-General notified by Pakistan Bureau of Labor Statistics of the quarter immediately preceding the relevant quarter. (If any such values are not available then the average of the end of month values for the most recent three (03) months shall be used.)
CPI-General _(REF)	=	172.78, Reference Average Consumer Price Index (General) for the quarter Oct 2012 to December 2012 as notified by the Pakistan Bureau of Statistics

iii. Adjustment for LIBOR/KIBOR variation

The interest part of fixed charge component will remain unchanged throughout the term except for the adjustment due to variation in the interest rate as a result of 6-monthly variation in LIBOR and KIBOR while spread (4.75%) on LIBOR and (3.25%) on KIBOR remaining the same according to the following formula:

<u>For foreign financing</u>		
ΔI	=	$P_{(REV)} * (LIBOR_{(REV)} - 0.4479\%) / 2$
<u>For local financing</u>		
ΔI	=	$P_{(REV)} * (KIBOR_{(REV)} - 9.57\%) / 2$
Where:		



ΔI	=	The variation in interest charges applicable corresponding to variation in 6-month LIBOR & KIBOR. ΔI can be positive or negative depending upon whether $LIBOR_{(REV)}/KIBOR_{(REV)} >$ or $< 0.4479\%/9.57\%$ respectively. The interest payment obligation will be enhanced or reduced to the extent of ΔI for each six-monthly adjustment on the basis of applicable six-monthly LIBOR/KIBOR.
$P_{(REV)}$	=	Is the outstanding principal (as indicated in the attached debt service schedule to this order at Annex-II and III) on a bi-annual basis at the relevant six-monthly calculations date. Period 1 shall commence on the date on which the 1 st installment is due after availing the grace period.

Note:

Foreign debt and its interest shall be adjusted for exchange rate variation against the average TT & OD selling rate of US dollar for each Wednesday for the semi-annual period immediately preceding the relevant period as notified by the National Bank of Pakistan

iv. Return on Equity (ROE), Special Return on Equity (SROE) and Return on Equity During Construction (ROEDC):

The Return on Equity (ROE), Special Return On Equity (SROE) and Return on Equity during Construction (ROEDC) components of tariff will be adjusted for exchange rate variation on the basis of revised TT & OD selling rate of US Dollar notified by the National Bank of Pakistan according to the following formula;

$ROE_{(REV)}$	=	$ROE_{(REF)} \times ER_{(REV)} / ER_{(REF)}$
$SROE_{(REV)}$	=	$SROE_{(REF)} \times ER_{(REV)} / ER_{(REF)}$
$ROEDC_{(REV)}$	=	$ROEDC_{(REF)} \times ER_{(REV)} / ER_{(REF)}$
Where:		
$ROE_{(REV)}$	=	The revised ROE component of the tariff expressed in Rs/kWh
$ROE_{(REF)}$	=	The reference ROE component of the tariff expressed in Rs/kWh
$SROE_{(REV)}$	=	The revised SROE component of the tariff expressed in Rs/kWh
$SROE_{(REF)}$	=	0.4142, The reference SROE component of the tariff expressed in Rs/kWh



ROEDC _(REV)	=	The revised ROEDC component of the tariff expressed in Rs/kWh
ROEDC _(REF)	=	1.1981, The reference ROEDC component of the tariff expressed in Rs/kWh
ER _(REV)	=	The Revised average TT & OD selling rate of US dollar for each Wednesday for the quarter immediately preceding the relevant quarter as notified by the National Bank of Pakistan
ER _(REF)	=	Rs. 96.13/US \$ the reference average exchange rate of each Wednesday of the quarter Oct 2012 to December 2012

v. Insurance:

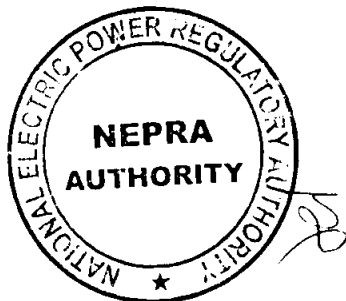
In case of insurance denominated in US \$, insurance cost component of tariff will be adjusted on account of US\$/PKR exchange rate variation on annual basis. Further, insurance component of the reference tariff will be adjusted as per actually incurred prudent costs, subject to maximum of 1% of the EPC cost, on annual basis upon production of authentic documentary evidence by the petitioner according to the following formula:

Insurance _(REV)	=	Rs.0.2526/kWh / (1% of EPC Cost) x AP
Where:		
INS _(ADJ)	=	The revised insurance component.
RIC	=	The reference insurance component in Rs./kWh.
AP	=	Actual Insurance premium paid by the company.

III. Adjustment on account of inflation, US CPI, foreign exchange rate variation and KIBOR/LIBOR variation will be approved and announced by the Authority within fifteen working days after receipt of the Petitioner's request for adjustment in tariff in accordance with the requisite indexation mechanism stipulated herein.

IV. Terms and Conditions of Tariff:

General assumptions of LEL, which are not covered in this decision, will be dealt with according to standard terms of its approved PPA.





- V. The order along with revised tariff table and debt servicing schedules as attached thereto are recommended for notification by the Federal Government in the official gazette in accordance with 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)
Member

(Syed Masood Ul Hassan Naqvi)
Member

(Brig. (R) Tariq Saddozai)
Chairman

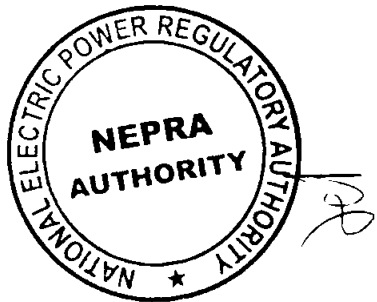
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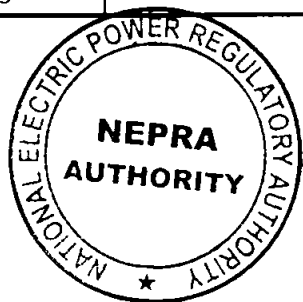
Agreement Year	VEPP						FEPP				Debt Service Component				Total Tariff		
	Water Use Charges		Var O&M		Fixed O&M		Insurance	Return on Equity	ROEDC	Special ROE	Foreign Loan		Local Loan		Total FEPP		
	Local	Local	Local	Local	Foreign	Local	Foreign	Foreign	Foreign	Foreign	Principal	Interest	Principal	Markup	PKR/KWh	PKR/KWh	Cents/KWh
	PKR/KWh	PKR/KWh	PKR/KWh	PKR/KWh	PKR/KWh	PKR/KWh	PKR/KWh	PKR/KWh	PKR/KWh	PKR/KWh	PKR/KWh	PKR/KWh	PKR/KWh	PKR/KWh	PKR/KWh	PKR/KWh	PKR/KWh
1	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	1.8688	1.1981	0.4142	2.2596	1.3213	0.7122	0.2304	9.2771	9.4712	9.8529	
2	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	1.8688	1.1981	0.4142	2.2596	1.2039	0.7122	0.2041	9.1333	9.3274	9.7033	
3	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	1.8688	1.1981	0.4142	2.2596	1.0864	0.7122	0.1778	8.9895	9.1836	9.5537	
4	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	1.8688	1.1981	0.4142	2.2596	0.9690	0.7122	0.1514	8.8457	9.0398	9.4041	
5	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	1.8688	1.1981	0.4142	2.2596	0.8515	0.7122	0.1251	8.7019	8.8960	9.2546	
6	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	1.8688	1.1981	0.4142	2.2596	0.7341	0.7122	0.0988	8.5581	8.7522	9.1050	
7	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	1.8688	1.1981	0.4142	2.2596	0.6166	0.7122	0.0724	8.4143	8.6084	8.9554	
8	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	1.8688	1.1981	0.4142	2.2596	0.4992	0.7122	0.0461	8.2706	8.4647	8.8058	
9	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	1.8688	1.1981	0.4142	2.2596	0.3817	0.7122	0.0198	8.1268	8.3209	8.6562	
10	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	1.8688	1.1981	0.4142	2.2596	0.2643	-	-	7.2774	7.4715	7.7726	
11	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	1.8688	1.1981	0.4142	2.2596	0.1468	-	-	7.1599	7.3540	7.6504	
12	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	1.8688	1.1981	0.4142	1.1298	0.0294	-	-	5.9126	6.1067	6.3529	
13	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	2.1478	1.1981	0.4142	-	-	-	-	5.0325	5.2266	5.4372	
14	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	2.1478	1.1981	0.4142	-	-	-	-	5.0325	5.2266	5.4372	
15	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	2.1478	1.1981	0.4142	-	-	-	-	5.0325	5.2266	5.4372	
16	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	2.1478	1.1981	0.4142	-	-	-	-	5.0325	5.2266	5.4372	
17	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	2.1478	1.1981	0.4142	-	-	-	-	5.0325	5.2266	5.4372	
18	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	2.1478	1.1981	0.4142	-	-	-	-	5.0325	5.2266	5.4372	
19	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	2.1478	1.1981	0.4142	-	-	-	-	5.0325	5.2266	5.4372	
20	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	2.1478	1.1981	0.4142	-	-	-	-	5.0325	5.2266	5.4372	
21	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	2.1478	1.1981	0.4142	-	-	-	-	5.0325	5.2266	5.4372	
22	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	2.1478	1.1981	0.4142	-	-	-	-	5.0325	5.2266	5.4372	
23	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	2.1478	1.1981	0.4142	-	-	-	-	5.0325	5.2266	5.4372	
24	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	2.1478	1.1981	0.4142	-	-	-	-	5.0325	5.2266	5.4372	
25	0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	2.1478	1.1981	0.4142	-	-	-	-	5.0325	5.2266	5.4372	

Average for 1- 10
 Average for 11- 20
 Average for 21- 25
 Average for 1- 25
 Levelized Tariff

0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	1.8688	1.1981	0.4142	2.2596	0.7928	0.6410	0.1126	8.5595	8.7536	9.1064
0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	2.0920	1.1981	0.4142	0.3389	0.0176	-	-	5.3332	5.5273	5.7501
0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	2.1478	1.1981	0.4142	-	-	-	-	5.0325	5.2266	5.4372
0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	2.0139	1.1981	0.4142	1.0394	0.3242	0.2564	0.0450	6.5636	6.7577	7.0300
0.1500	0.0441	0.1941	0.4410	0.5786	0.2526	1.9384	1.1981	0.4142	1.6565	0.6050	0.4519	0.0899	7.6262	7.8203	8.1355



REFERENCE FOREIGN LOAN REPAYMENT SCHEDULE							
Amounts are in Rs (000)							
Installments	Opening Balance	Interest	Repayment	Debt Service	Closing Balance	Tariff Component	
						Principal	Interest
	Rs	Rs	Rs	Rs	Rs	Rs/KWh	Rs/KWh
1	12,213,249	317,416	531,011	848,427	11,682,238		
2	11,682,238	303,616	531,011	834,626	11,151,227	2.2596	1.3213
3	11,151,227	289,815	531,011	820,826	10,620,217		
4	10,620,217	276,014	531,011	807,025	10,089,206	2.2596	1.2039
5	10,089,206	262,213	531,011	793,224	9,558,195		
6	9,558,195	248,413	531,011	779,424	9,027,184	2.2596	1.0864
7	9,027,184	234,612	531,011	765,623	8,496,173		
8	8,496,173	220,811	531,011	751,822	7,965,162	2.2596	0.9690
9	7,965,162	207,011	531,011	738,021	7,434,152		
10	7,434,152	193,210	531,011	724,221	6,903,141	2.2596	0.8515
11	6,903,141	179,409	531,011	710,420	6,372,130		
12	6,372,130	165,608	531,011	696,619	5,841,119	2.2596	0.7341
13	5,841,119	151,808	531,011	682,819	5,310,108		
14	5,310,108	138,007	531,011	669,018	4,779,097	2.2596	0.6166
15	4,779,097	124,206	531,011	655,217	4,248,087		
16	4,248,087	110,406	531,011	641,416	3,717,076	2.2596	0.4992
17	3,717,076	96,605	531,011	627,616	3,186,065		
18	3,186,065	82,804	531,011	613,815	2,655,054	2.2596	0.3817
19	2,655,054	69,004	531,011	600,014	2,124,043		
20	2,124,043	55,203	531,011	586,214	1,593,032	2.2596	0.2643
21	1,593,032	41,402	531,011	572,413	1,062,022		
22	1,062,022	27,601	531,011	558,612	531,011	2.2596	0.1468
23	531,011	13,801	531,011	544,812	0	1.1298	0.0294



REFERENCE LOCAL LOAN REPAYMENT SCHEDULE							
Amounts are in Rs (000)							
Period	Opening Balance	Markup	Repayment	Debt Service	Closing	Tariff Component	
						Principal	Markup
	Rs	Rs	Rs	Rs	Rs	Rs/KWh	Rs/KWh
1	3,012,594	55,701	167,366	223,068	2,845,228		
2	2,845,228	52,607	167,366	219,973	2,677,861	0.7122	0.2304
3	2,677,861	49,512	167,366	216,879	2,510,495		
4	2,510,495	46,418	167,366	213,784	2,343,129	0.7122	0.2041
5	2,343,129	43,323	167,366	210,690	2,175,762		
6	2,175,762	40,229	167,366	207,595	2,008,396	0.7122	0.1778
7	2,008,396	37,134	167,366	204,501	1,841,030		
8	1,841,030	34,040	167,366	201,406	1,673,663	0.7122	0.1514
9	1,673,663	30,945	167,366	198,312	1,506,297		
10	1,506,297	27,851	167,366	195,217	1,338,931	0.7122	0.1251
11	1,338,931	24,756	167,366	192,122	1,171,564		
12	1,171,564	21,662	167,366	189,028	1,004,198	0.7122	0.0988
13	1,004,198	18,567	167,366	185,933	836,832		
14	836,832	15,473	167,366	182,839	669,465	0.7122	0.0724
15	669,465	12,378	167,366	179,744	502,099		
16	502,099	9,284	167,366	176,650	334,733	0.7122	0.0461
17	334,733	6,189	167,366	173,555	167,366		
18	167,366	3,095	167,366	170,461	(0)	0.7122	0.0198

