



National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/TRF-100/Laraib-2009/9599-9601
June 30, 2016

Subject: **Decision of the Authority in the Matter of Motion for Leave for Review filed by Laraib Energy Limited (LEL) against the Authority's COD Tariff Adjustment Decision (Case No. NEPRA/TRF-100/2009)**

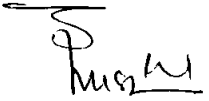
Dear Sir,

This is in continuation of this office letter No. NEPRA/R/TRF-100//2009/4948-4950 dated April 14, 2016 whereby Decision of the Authority in the matter of tariff adjustment at Commercial Operation Date of 84 MW New Bong Escape Hydropower Project of Laraib Energy Ltd. was sent to the Federal Government for notification in the official Gazette.

2. Please find enclosed herewith the subject Decision of the Authority along with Annexure-I, II & III (23 pages) in the matter of Motion for Leave for Review filed by Laraib Energy Limited (LEL) against the Authority's COD Tariff Adjustment Decision.
3. The Decision is being intimated to the Federal Government for the purpose of notification in the official gazette pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997).
4. The Order along with Revised Tariff Table (Annex-I) and Debt Servicing Schedules (Annexure-II & III) of the Decision need to be notified in the official Gazette.

Enclosure: As above

Secretary,
Ministry of Water & Power,
Government of Pakistan
Islamabad.


30.06.16
(Syed Safer Hussain)

CC:

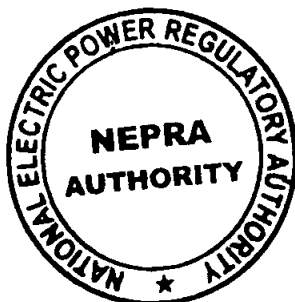
1. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad
2. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad.



**Decision of the Authority in the Matter Of Motion for Leave for Review Filed by
Laraib Energy Limited (LEL) Against The Authority's
COD Tariff Adjustment Decision**

1. Introduction:

- 1.1. Laraib Energy Limited (herein after referred to as "LEL", "the company", "petitioner") 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 also provided for 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 of LEL. Accordingly, the decision of the Authority in the matter of COD tariff adjustment of LEL was issued by the Authority on April 14, 2016.
- 1.3. LEL being aggrieved with certain components of the COD tariff adjustment decision of the Authority filed motion for leave for review vide letter No319900131/LEL/16 on April 26, 2016 while referring to the Regulation 3(2) of the NEPRA (Review Procedure) Regulations, 2009. Said regulation requires that a Review Motion is competent only upon discovery of new and important matter of evidence or on account of some mistake or error apparent on the face of the record or from any other sufficient reasons.
- 1.4. The Authority admitted the referred review motion on May 11, 2016 wherein some grievances have been raised on the following heads:-
 1. Lenders Advisors and agents
 2. Cost overruns
 3. Land Litigation Cases
 4. Exchange Loss
 5. Computation of SROE

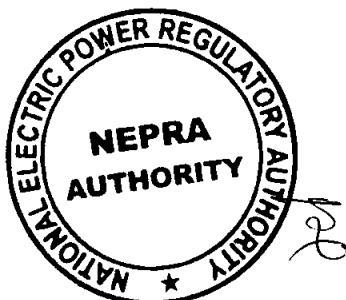


6. Indexation of Insurance Component
 7. Indexation of water use charges
 8. Pass through items
- 1.5. In order to consider the contentions of LEL and to provide opportunity of hearing to the parties to the proceedings, a hearing was fixed for June 02, 2016 at 11:00 am in NEPRA Head Office. Notices of hearing were sent to parties to the proceedings i.e. NTDCL, CPPA-G and LEL. The hearing on referred date was attended by the representatives from NTDCL, CPPA-G and LEL. During the hearing, LEL reiterated their submissions of Review Motion filed and requested Authority to review those aspects of COD decision.
- 1.6. Having heard the contentions raised during the course of hearing and after having gone through the relevant record and documentary evidences, the Authority on respective points agitated by the Petitioner has decided as follows

2. **Lenders fee and Lenders advisors and agents:**

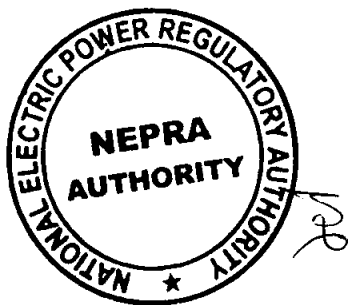
- 2.1 The cumulative cost allowed in the original tariff determination/approved schedule VI of PPA for lenders fee & lenders advisors and agents was upto US \$ 8.75 million which includes US \$ 4.167 million for lenders fee was and US \$ 4.587 million for lenders advisors and agents was which adds upto US \$ 8.75 million. This cost was 6.26% of the Capex Loan. LEL at the time of COD tariff adjustment requested to allow a cumulative US \$ 10.414 million which includes US \$ 4.334 million for lenders fee and US \$ 6.080 million for lenders advisors and agents.
- 2.2 The Authority in the COD tariff adjustment decision of LEL decided as under;

"The Authority has observed that the cost for lenders fee, lenders advisors and agents agreed between NTDCL 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 apex loan to any other Hydropower project (HPP). The Authority considers that allowing 6.26% financial charges on CAPEX will tent-amount to discrimination. In view thereof on the principle of equity, fairness and justice financial charges are being allowed with in 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"





- 2.3 Being aggrieved LEL pleaded that Authority had approved the amounts as per PPA, based on which financiers had agreed & petitioner has based its investment decision. Restricting the financial charges at par with other hydro power project will be in contradiction to PPA as approved by the Authority at the time of original tariff determination. Such retrospective adjustment of certain allowed costs is also against the principles of natural justice.
- 2.4 The particular and specific grounds on which LEL submitted that this cost should not be considered consistent to the benchmark 3% of the capex loan is that the foreign banks were not lending in AJK (disputed territory) however after efforts, ADB was the lead for hydel Project along with IDB (2005). Later, the project development again suffered due to funding issue and later to cover funding gap IFC & PROPARCO had to be also involved (2009) as lenders. Moreover, engagement of foreign DFIs like ADB, IDB, and IFC also prompted encouragement for local banks to have learning and financing opportunity (HBL & NBP) for a first time hydel project in private sector.
- 2.5 Further, LEL submitted that the unique aspect of this project which again distinguish & justify more than the benchmark cost allowed in similar projects is that due to extensive review by the lenders advisors and agents which included even the constitutional changes made in AJK for such projects. Furthermore, various templates were first time created including the legal opinions and waivers that have become standardized documents following the completion of this Project. The effort made and the cost incurred by the Company has not only benefited the Project but also the entire hydropower sector in Pakistan/AJ&K.
- 2.6 For the exceeded claim of US \$ 1.66 million against PPA incorporated amount, LEL submitted that the primary reason for the cost spillover from the reference was on account of legal fees paid to Lenders' foreign & local legal counsel due to their excessive involvement in following matters during the construction period:
- Satisfying conditions for each drawdown during the construction period;
 - Review and opinion to lenders on land litigation cases;
 - Monitoring of various provisions of the financing documents during construction; and
 - Processing waivers for various project/construction/environmental matters with the six banks required for processing of drawdown of funds during construction period.



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2.7 Keeping in view the submission of the Petitioner, justifying the reason for the higher financial charges (Lenders fee and Lenders advisors and agents) and particular & unique circumstances surrounding this first hydropower project in IPP mode, the Authority has decided to allow the lenders fee and lenders advisors and agents fee of US \$ 8.75 million as per the original tariff determination. Accordingly the allowed lenders fee is US \$ 4.167 million (Rs. 357.434 million) at weighted average exchange rate of Rs. 85.75/US \$ based on exchange rate prevailing on the each transaction date. Similarly the allowed lenders advisors and agents fee is US \$ 4.587 million (Rs. 410.696 million) at weighted average exchange rate of Rs. 89.53/US \$ based on exchange rate prevailing on the each transaction date.

3. **Cost Overruns:**

3.1 The Authority with respect to the cost overruns claim decided in the COD tariff adjustment decision as under:

“The Authority after detailed deliberation on the project cost overruns and other various O & M cost overruns forwarded by NTDC, 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.”

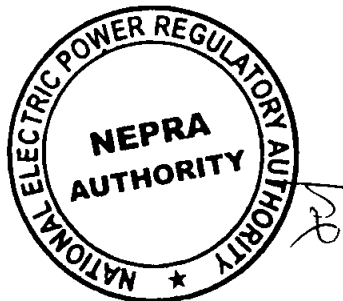
LEL submitted head wise arguments with respect to cost overruns which are briefly referred;

3.2 **Independent Monitoring Consultant US \$ 0.21 million:**

LEL submitted that it was envisaged that the lender’s engineer, having a sufficient degree of independence from the Company, would also fulfil the role of “independent engineer” for the Power Purchaser under the PPA. However, the Power Purchaser did not accept such an arrangement and asked for the appointment of an independent monitoring consultant with its approval.

3.3 **Factory Inspection Program - US\$ 0.45 million:**

LEL submitted that the factory inspection program was not factored in EPC contract as this cost was uncertain at the time of original tariff petition. Further, LEL submitted that due to the basis



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of "Ijara" financing whereby the IDB has a charge on the asset it was deemed prudent to witness manufacturing and fabrication of equipment in the factory. LEL hired a Canadian organization to check the quality of materials, workmanship, the manufacturing processes, construction details, equipment features, testing procedures and test results in order to verify the compliance with the specifications and the manufacturer's drawings.

3.4 Additional Assets Added - US\$ 2.103 million:

LEL submitted that following additional assets cost was also incurred;

Item of Plant	Cost
	<i>US\$ million</i>
Trashracks and trash cleaning machine	1.451
Generator Monitoring System	0.600
Satellite Communication System	0.037
AJ&K SCO Telephone System	0.015
Total	2.103

The rationale provided by LEL is briefly referred:

3.4.1 Trash-rack & Trash-rack cleaning machine – US\$ 1.451 million:

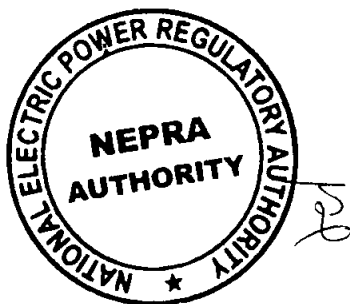
LEL submitted that as per the initial assessment Trash-racks and trash-racks cleaning machine were not required therefore were not included in the scope of EPC contract. Later, upon technical advice during construction period a cost of US\$ 1.451 million for Trash-racks and trash-racks cleaning machine was procured and installed since the water coming from Mangla passing through Mangla trash racks was not trash free.

3.4.2 Generator Monitoring System – US\$ 0.60 million:

LEL submitted that the cost of US\$ 0.60 million was incurred on the installation of generator monitoring equipment which was an optional item in the EPC contract and hence the cost was not included in the EPC contract approved.

3.4.3 Satellite Communication System – US\$ 0.037 million:

LEL stated that Satellite Communication System being the technical requirement under the PPA should be provided by the EPC contractor through PLC. However, due to delay in implementation of the load dispatch projects of the Government, the Company had to incur an



amount of US \$ 7.3 million to get the system through an alternative measure. This was not envisaged at the time of EPC contract and hence was not earlier included in contractor's responsibility.

3.4.4 AJK / SCO Telephone System – US\$ 0.15 million:

LEL submitted that it is obligatory for the Project site in the AJ&K to get connection through the Special Communication Organization ("SCO") of the Pakistan Army to facilitate voice and internet facility to the Project site. As this was a requirement for project therefore the cost of US \$ 0.15 million was incurred for the purpose.

3.5 Fixed Cost of RMB/USD Exchange Risk US\$ 0.25 million:

LEL submitted that US\$ 51.81 million of the EPC cost was in equivalent Chinese currency but the Contractor was unwilling to take the currency risk, therefore, the Company negotiated a fixed lump-sum arrangement whereby against a fixed payment of US\$ 0.25 million the currency exchange risk was taken over by the EPC contractor.

3.6 Financing Charges relating to Debt Service Reserve Account (DSRA):

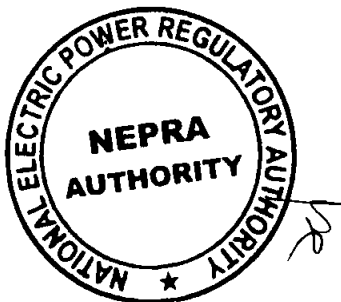
LEL submitted that DSRA is the essential requirement of non-recourse financing which was not envisaged earlier at the time of PPA execution. Therefore in order to ensure the debt payment, the sponsors had to fund the DSRA in favour of the lenders until the entire loan is repaid. Such financing cost computed as PKR 9.02 million per annum on average basis was not envisaged in earlier; therefore, LEL claimed it as a pass-through item upon payment on quarterly basis.

3.7 Monitoring Fee:

LEL submitted that the Company has been exposed to the intensive "monitoring" of the Project through allocation of additional resources within the banks. Such cost was claimed by the Financiers at the time of signing of the Financing Documents executed in November 2009 which was not envisaged at the time of the Company's application for the EPC stage tariff.

The annual amount of the Monitoring Fee is US\$ 80,000 per annum which is claimed by the Company as a Pass-Through Item after making such payment during the tenor of the loan.

3.8 In view of the foregoing, Authority concluded that the matter with regards to the cost overruns was earlier decided based on the submission of the petition and in the light of its earlier tariff





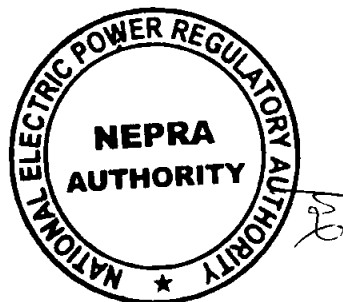
determination and COD tariff adjustment decision, wherein the Authority has already specified that the cost overruns are outside the scope of Power Purchase Agreement signed with power purchaser. Further as already referred that the scope of COD adjustment is restricted to the adjustment of costs which have been earlier considered and agreed between NTDC and LEL. Therefore, the claim with regard to the cost overruns needs no further consideration by the Authority.

4. **Land Litigation Cases:**

- 4.1 LEL at the time of COD tariff adjustment submitted that the several land litigation cases are under adjudication in various courts therefore a reopener should be allowed so that any cost that company would have to bear as a result of final outcome of these cases, could be passed on.
- 4.2 The Authority in the COD tariff adjustment decision did not allow any opener for these costs overruns and have already allowed the cost after verification of relevant source documents.
- 4.3 LEL in its review motion submitted that several land litigation cases are still under adjudication in various Courts of Law in AJK in relation to the land acquired for the Project under the land lease agreements from the Government of Azad Jammu & Kashmir, the final outcome may result in additional cost to the Company, therefore, LEL may be a reopener with respect to the land litigation cases after the adjustment at COD as a Pass-Through Item as and when these cases are decided.

A brief summary of these case along with the amounts claimed (potential financial impact) is as under:

Nature of Case	Background	Potential Impact	Current status
Land Compensation Claims (7 cases)	These cases were notified to the Company in early 2010, and are against the GOAJK and the Company has been made a party to these cases. Cases relates to the adequacy of the amount of compensation paid and not the award of the land itself.	Rs 418.87 Million	Under litigation at various courts



4.4 The Authority after detailed deliberation on the matter concluded that consistent to the tariff determination and as per the verifiable cost have already been adjusted in the COD decision, allowing a reopener at this stage is neither the scope of COD adjustment nor as per PPA. Moreover such contingent arrangement cannot be considered and approved.

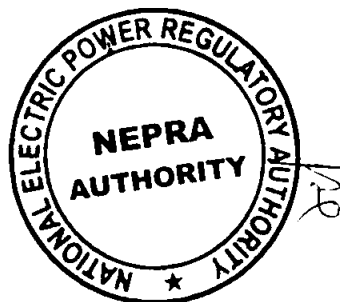
5. **Exchange Loss US\$ 0.41 million:**

5.1 The Authority with regard to LEL's claim of exchange loss decided in the COD tariff adjustment as under:

"The Authority as per the PPA 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."

5.2 LEL being aggrieved with the above referred decision of the Authority submitted that the exchange loss, computed under accepted accounting principles is the additional amount the Company had to pay due to the fluctuation of the exchange rate during the construction of the Project. They also submitted that the exchange loss to be allowed as a one-time adjustment and this number was also recommended for approval by the Power Purchaser pursuant to PPA. Furthermore, the NEPRA approved auditor also verified this amount but restricted the claim to US\$ 0.410 million representing the net exchange loss suffered (realized loss) by Company on transactions made during the construction period only.

5.3 The Authority after detailed review of the submission of the petitioner regarding the exchange loss noted that LEL has not been able to substantiate its claim by presenting any new evidence and argument which was not considered by the Authority earlier. Further the computation made for exchange loss claim is an accounting treatment under relevant financial reporting standards which cannot be implied on tariff computation. Moreover, the total cost incurred has already been allowed to LEL on the basis of the actual exchange rate prevailing on the date of the transaction hence the claim of a separate exchange loss is not plausible.





6. **Computation for "Special Return on Equity" ("SROE"):**

6.1 LEL with regard to the calculation of SROE submitted that the Authority has allowed SROE of Rs 0.4142 /KWh based on return of US \$ 11.679 million accumulated for the period 2004 till construction start date which is calculated as follows:

$$\text{Allowed accumulated return} = \frac{\text{Total approved equity} \times \text{Actual accumulated return}}{\text{Total injected equity}}$$

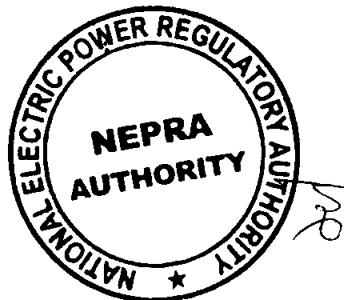
$$\text{USD 11.679 million} = \frac{\text{USD 53.749 million} \times \text{USD 12.657 million}}{\text{USD 58.252 million}}$$

6.2 LEL submitted that the above referred apportionment has been made by Authority on the premise that the equity injected before construction start had also been used to partially fund the additional costs (cost overruns), prorate adjustment in the SROE component has no valid financial or accounting basis and is designed only to reduce the legitimate benefit to the Company, against the principles of equity, justice and accounting.

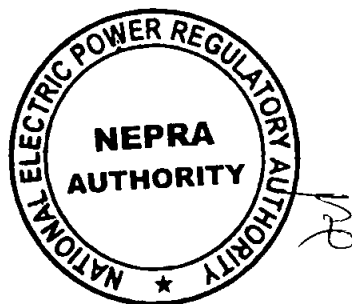
6.3 The Authority after detailed deliberation on the matter concluded that as the return has been computed on the basis of Equity assessed as per standard practice on the same principle the return to be allowed is also prorated on weighted average basis. Any return claimed on equity more than the assessed equity has accordingly being not allowed by the Authority

7. **Indexation of "Insurance during Operations":**

7.1 The approved PPA provided quarterly indexation of insurance component due to the exchange rate variation. The Authority at the time of COD tariff adjustment observed that the insurance adjustment mechanism is inconsistent to the insurance adjustment mechanism allowed to other IPPs. The sole purpose of the adjustment mechanism should ensure the recovery of incurred costs therefore the Authority had made the insurance adjustment mechanism as per standard practice and also at par with other IPPs and allowed annual adjustment of insurance component on production of documentary evidences.



- 7.2 LEL being aggrieved with the Authority's decision submitted that the Authority's decision to make the insurance adjustment mechanism consistent with the mechanism adopted in the case of other IPPs is not consistent to the provisions of the PPA and therefore needs rectification.
- 7.3 Based on the submitted details it is observed that premium for the Material Damage & Business Interruption, Public & Product Liability Insurance the premium is paid in 03 installments. 1st installment (35% of premium) is made within 60 days of the covered insurance period, 2nd installment (35% of Premium) in made within 120 days of the covered insurance period, 3rd installment (30% of the premium) in made within 180 days of the covered insurance period. For the Terrorism & Sabotage insurance premium is paid in two equal installments. 1st installment (50% of premium) is made within 90 days of the covered insurance period, 2nd installment (35% of Premium) in made within 180 days of the covered insurance period.
- 7.4 In view of the foregoing the Authority has noted that as the premium is neither paid on quarterly basis nor on annual basis, but rather paid on periodic basis within the six months of the covered period therefore claiming adjustment of insurance component on quarterly basis due to exchange rate variation is not substantiated. The Authority also considered that the insurance adjustment mechanism aim is to provide recovery of full cost incurred on account of insurance premium irrespective of either the insurance premium is paid on quarterly basis, annual basis or on a periodic basis. The Authority noted that the COD decision was based on the same principle and was ensuring the full recovery of insurance cost; therefore Authority's earlier decision in this regard will remain intact.
8. **Indexation of "Water Use Charge":**
- 8.1 As per the approved PPA the allowed component of WUC was Rs. 0.1500/kWh which was subject to quarterly indexation due to inflation.
- 8.2 LEL at the time of COD claimed indexed WUC component of Rs. 0.2704/kWh instead of fixed component of Rs 0.1500/kWh.
- 8.3 The Authority at the time of COD tariff adjustment allowed Rs. 0.15/kWh as WUC component as this is the fixed component allowed to all the hydropower IPPs. Further the Authority observed that the insurance of other hydropower IPPs is adjusted annually due to inflation and first such adjustment of WUC component is made after one year of COD however the PPA of LEL provided quarterly indexation mechanism for the adjustment of WUC component due to inflation.





- 8.4 LEL submitted that as per the PPA the Water Use Charge has to be adjusted quarterly from the March 2009 but in the COD Tariff adjustment Decision the Authority has determined the Water Use Charge component of Rs. 0.1500/kWh at COD that would be subject to annual indexation thereafter. The decision taken by NEPRA contradicts the Original Tariff Decision.
- 8.5 LEL later also submitted the correspondence with the Private power cell of Azad Govt. of State of Jammu & Kashmir wherein they had claimed the indexation on WUC component as per PPA. in view of the foregoing the Authority deliberated on the matter and also the arrangement wherein it will be paid to the Govt of AJK. Accordingly, Authority decided to allow the indexed WUC component of Rs. 0.2657/kWh to LEL at COD. Further, the Authority also allowed the quarterly indexation of WUC component consistent to the approved PPA.

9. **Pass-Through Items:**

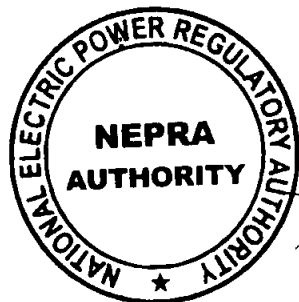
- 9.1 LEL submitted following arguments with regard to the pass through items;

"Section 10.1 of Schedule 6 to the PPA provides that "Pass-Through Items shall be payable by the Power Purchaser to the Company on the basis of the actual costs reasonably incurred by the Company to satisfy the requirements of the Power Purchase Agreement or to the extent that the Company is obligated pursuant to the Laws of Pakistan to make payment for such Pass-Through Item(s)".

Such Pass-Through Items are mentioned under Section 10.3 of Schedule 6 to the PPA are as follows:

- (a) Dividend withholding tax
- (b) Payments to Workers' Welfare Fund and Workers' Profit Participation Fund
- (c) Sales tax, excise duty or other duty etc on sale of electricity
- (d) Cost of Metering System
- (e) Any upgrade to the protective devices of the Complex
- (f) Cost of more reliable Water Meters
- (g) Costs suffered by the Company due to Change in Tax
- (h) Change in Water Use Charge beyond PKR 0.15 per KWh
- (i) Cost suffered by the Company due to Change in general assumptions as provided in Section 8 of Annex IV to Schedule 6 of the PPA

We note that Paragraph I on page 21 of the Impugned Tariff Decision mentioned only income tax and dividend withholding tax as Pass-Through Items. Since the matter relating to Pass-Through Items under the PPA is critical for the Company, the Authority is





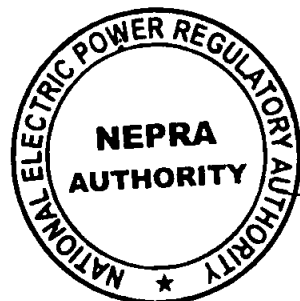
therefore requested to confirm the Company's assumption that Paragraph I on page 21 of the Impugned Tariff Decision does not restrict the scope of the PPA, Schedule 6 and Section 10.3. In case our assumption is incorrect, then the Company hereby requests the Authority to review its decision as the same will be in violation of the PPA and the applicable law."

9.2 In view of the request by LEL the Authority hereby elaborates that all the above referred items are pass through as per the schedule VI of PPA. However for clarity purpose these all items as per approved PPA are incorporated as pass through item in this decision.

10. **Project Cost:**

Brief summary of the allowed project cost to LEL at COD is as under;

EPC On Shore	64,622,512	5,720,750,317	88.53
EPC Offshore	85,000,000	7,557,938,831	88.92
EPC cost Escalation	7,156,987	631,946,008	88.30
Total EPC	156,779,500	13,910,635,156	88.73
Customs Duties	5,385,822	452,624,057	84.04
Interest During Construction	19,496,384	1,803,084,379	92.48
Land Resettlement	1,493,543	104,033,045	69.66
Insurance During Construction	3,686,836	318,760,033	86.46
Letter of Credit	1,250,000	107,375,000	85.90
Lenders Fee	4,167,020	357,434,925	85.78
Lenders Advisors & Agents	4,587,066	410,696,908	89.53
Subtotal	40,066,672	3,554,008,346	88.70
Other PDC and Non EPC Cost			
Feasibility & Technical Studies	2,738,075	226,879,548	82.86
OBE Repair and Foot Bridge	640,000	53,031,020	82.86
O&M Mobilization	2,240,000	185,608,571	82.86
Owner's Engineer/construction supervision	2,795,491	231,637,093	82.86
Owners Administration	9,424,983	780,963,225	82.86
Owners Advisor	2,506,950	207,728,307	82.86
Staff Colony	2,680,488	222,107,833	82.86
Subtotal	23,025,987	1,907,955,598	82.86

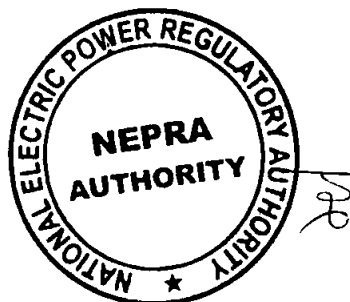


11. ORDER

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:

Tariff Components	Year 01-09 Rs./kWh	Year 10-12 Rs./kWh	Year 13-25 Rs./kWh	Indexation
Variable Energy Purchase Price (VEPP)				
WUC	0.2657	0.2657	0.2657	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)	1.9113	1.9113	2.1966	PKR/US\$
Special return on equity (SROE)	0.4237	0.4237	0.4237	PKR/US\$
Return on equity during construction (ROEDC)	1.2254	1.2254	1.2254	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;

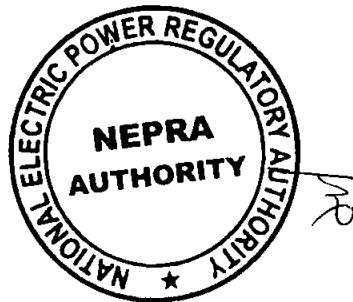
I. Pass-Through Items

- a. 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	=	$[(17\% * (E_{(Ref)} - E_{(Red)}) + ROEDC_{(Ref)} + SROE_{(Ref)}) * 7.5\%]$
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.



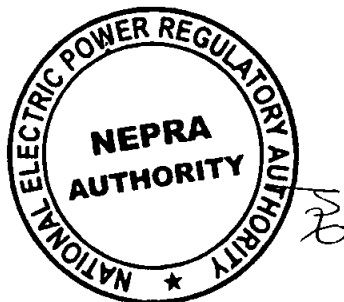
- b. Payments by the Company into the Workers' Welfare Fund and the Workers' Profit Participation Fund for its employees required to be paid in relation to the Project pursuant to the Laws of Pakistan;
- c. Sales Tax, excise duty or other duty, levy, charge, surcharge or other governmental impositions (including without limitation, export tax, octroi, rawangi mahsool, etc.) wherever and whenever payable on the generation, sale, exportation, or supply of electricity or electricity generating capacity by the Company during the Term, provided that the Company has not been previously compensated for any such item by the Power Purchaser or the GOP.
- d. The cost of the Metering System if not procured by the Power Purchaser, as provided in Section 8.2(b) of the Power Purchase Agreement;
- e. Any upgrade to the protective devices of the Complex required by the Power Purchaser pursuant to Section 7.5 of the Power Purchase Agreement;
- f. The cost paid by the Company to procure and install more accurate or more reliable Water Meters requested by the Power Purchaser under Section 8.8(b) of the Power Purchase Agreement;
- g. Subject to the provisions of the Power Purchase Agreement, Costs incurred or suffered by the Company in accordance with Section 14.4 of the Power Purchase Agreement;
- h. Any change in Water Use Charge beyond PKR 0.15 per KWh; and
- i. Cost incurred or suffered by the Company for any change in general assumptions as provided in Section 8 of Annex IV; provided that the Power Purchaser may require the Company to provide all reasonable supporting information and or documentation to satisfy itself with regards to the Company's claim.

II. **Indexations:**

The following indexation shall be applicable to the reference tariff;

i. **Indexation applicable to O&M:**

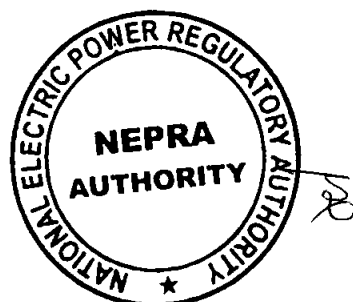
The local part of O&M cost will be adjusted on account of Inflation (CPI-General) and O&M foreign will be adjusted on account of variation in Rupee/Dollar exchange rate and US CPI. Quarterly Adjustment for local inflation, foreign inflation and exchange rate





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:

$V O\&M_{(LREV)}$	=	$VO\&M_{(LREF)} * CPI-G_{(REV)} / 172.78$
$F O\&M_{(LREV)}$	=	$FO\&M_{(LREF)} * CPI-G_{(REV)} / 172.78$
$F O\&M_{(FREV)}$	=	$FO\&M_{(FREF)} * US CPI_{(REV)} / 230.380 * ER_{(REV)} / 96.13$
Where:		
$V O\&M_{(LREV)}$	=	The revised applicable Variable O&M local component of the Variable Charges indexed with CPI – General
$F O\&M_{(LREV)}$	=	The revised applicable Fixed O&M local component of the Fixed Charges indexed with CPI – General
$F O\&M_{(FREV)}$	=	The revised applicable Fixed O&M foreign component of the Fixed Charges indexed with US CPI and currency variation
$V O\&M_{(LREF)}$	=	0.0441, The reference Variable O&M local component of the Variable Charges for the relevant period
$F O\&M_{(LREF)}$	=	0.5786, The reference fixed O&M local component of the Fixed Charges for the relevant period
$FO\&M_{(FREF)}$	=	0.4411, 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

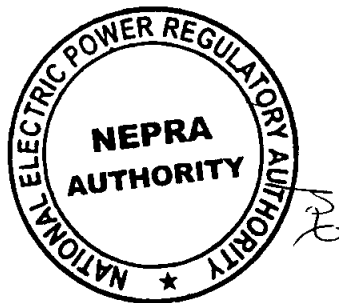
ii. Indexation for Water Use charges:

Water use charges will be paid on units delivered basis and will be indexed with CPI-General quarterly, according to the formula;

$WUC_{(REV)}$	=	$Rs. 0.2657/kWh * CPI-General_{(REV)}/CPI-General_{(REF)}$
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:





For foreign financing ΔI	=	$P_{(REV)} * (LIBOR_{(REV)} - 0.4479\%) / 2$
For local financing 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.

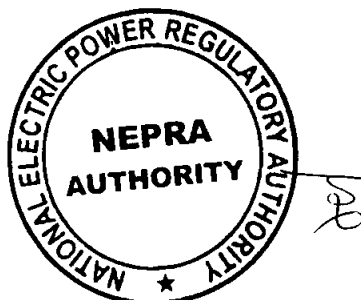
Note:

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;

$ROE_{(REV)}$	=	$ROE_{(REF)} * ER_{(REV)} / ER_{(REF)}$
$SROE_{(REV)}$	=	$SROE_{(REF)} * ER_{(REV)} / ER_{(REF)}$
$ROEDC_{(REV)}$	=	$ROEDC_{(REF)} * ER_{(REV)} / ER_{(REF)}$
Where:		



A



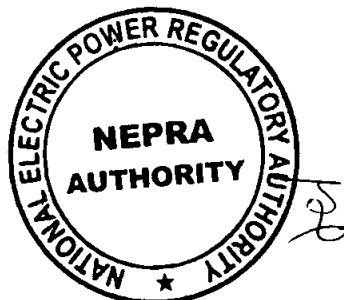
$ROE_{(REV)}$	=	The revised ROE component of the tariff expressed in Rs/kWh
$ROE_{(REF)}$	=	The reference ROE component of the tariff expressed in Rs/kWh
$SROE_{(REV)}$	=	The revised SROE component of the tariff expressed in Rs/kWh
$SROE_{(REF)}$	=	0.4237, The reference SROE component of the tariff expressed in Rs/kWh
$ROEDC_{(REV)}$	=	The revised ROEDC component of the tariff expressed in Rs/kWh
$ROEDC_{(REF)}$	=	1.2254, 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.



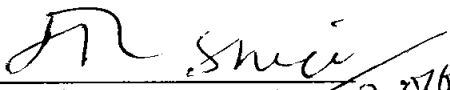



IV. **Terms and Conditions of Tariff:**

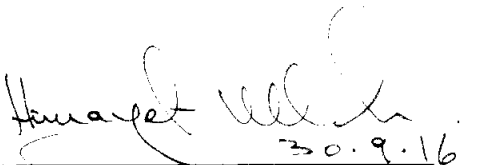
General assumptions of LEL, which are not covered in this decision, will be dealt with according to standard terms of its approved PPA.


- V. The order along with revised tariff table and debt servicing schedules as attached thereto are intimated to the Federal Government for notification in the official gazette in accordance with Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997

AUTHORITY

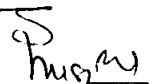

(Maj (R) Haroon Rashid) 23/06/16
Member


Syed Masood ul Hassan Naqvi 23/6
Member


(Himayat Ullah Khan) 30.9.16
Vice Chairman

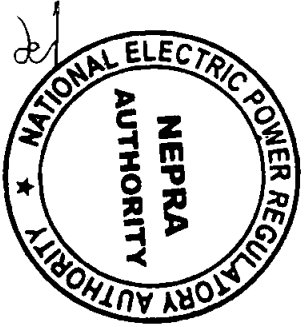

Brig. (R) Tariq Saddozai 22/6
Chairman



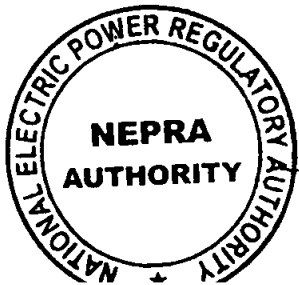

30.06.16

Larab Energy Limited
New Bong Escape Hydropower Project
Revised Tariff (In PKR)

Agreement Year	Water Use Charges		VEPP		Fixed O&M		Insurance		Return on Equity		RCLDC		Special ROE		Debt Service Component				Total VEPP	Total Tariff
	Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign	Principal	Interest	Local	Local		
1	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	1.3514	0.7284	0.8170	0.7237					9.0092	9.3190
2	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	1.3112	0.7284	0.7237					5.4255	5.7353	
3	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	1.1111	0.7284	0.5363					5.1179	5.4277	
4	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	0.8709	0.7284	0.4483					6.7974	7.1072	
5	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	0.7508	0.7284	0.3505					7.9974	8.3072	
6	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	0.6306	0.7284	0.2584					8.3072	8.6169	
7	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	0.5105	0.7284	0.1654					8.3194	8.6291	
8	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	0.3904	0.7284	0.0700					8.3194	8.6413	
9	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	0.2703	-	-					8.3194	8.6535	
10	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	0.1502	-	-					8.3194	8.6657	
11	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	0.0300	-	-					8.3194	8.6779	
12	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	-	-	-					8.3194	8.6901	
13	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	-	-	-					8.3194	8.7023	
14	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	-	-	-					8.3194	8.7145	
15	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	-	-	-					8.3194	8.7267	
16	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	-	-	-					8.3194	8.7389	
17	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	-	-	-					8.3194	8.7511	
18	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	-	-	-					8.3194	8.7633	
19	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	-	-	-					8.3194	8.7755	
20	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	-	-	-					8.3194	8.7877	
21	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	-	-	-					8.3194	8.8000	
22	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	-	-	-					8.3194	8.8122	
23	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	-	-	-					8.3194	8.8244	
24	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	-	-	-					8.3194	8.8366	
25	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	-	-	-					8.3194	8.8488	
Average for 1-10	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	0.8108	0.6556	0.3992					9.0092	9.3190	
Average for 11-20	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	0.0180	-	-					5.4255	5.7353	
Average for 21-25	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	-	-	-					5.1179	5.4277	
Average for 1-25	0.2657	0.0441	0.3098	0.4410	0.5786	0.2526	1.9113	1.2254	0.4237	2.3110	0.3315	0.2632	0.1597					6.7974	7.1072	
Levelized Tariff	0.2764	0.0459	0.3223	0.4588	0.6019	0.2628	2.0672	1.2747	0.4408	1.7624	0.6436	0.4807	0.3314					8.3194	8.6416	



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	12,490,736	324,628	543,075	867,703	11,947,660		
2	11,947,660	310,514	543,075	853,589	11,404,585	2.3110	1.3514
3	11,404,585	296,399	543,075	839,475	10,861,509		
4	10,861,509	282,285	543,075	825,361	10,318,434	2.3110	1.2312
5	10,318,434	268,171	543,075	811,246	9,775,358		
6	9,775,358	254,057	543,075	797,132	9,232,283	2.3110	1.1111
7	9,232,283	239,942	543,075	783,018	8,689,207		
8	8,689,207	225,828	543,075	768,904	8,146,132	2.3110	0.9910
9	8,146,132	211,714	543,075	754,789	7,603,056		
10	7,603,056	197,600	543,075	740,675	7,059,981	2.3110	0.8709
11	7,059,981	183,485	543,075	726,561	6,516,906		
12	6,516,906	169,371	543,075	712,447	5,973,830	2.3110	0.7508
13	5,973,830	155,257	543,075	698,332	5,430,755		
14	5,430,755	141,143	543,075	684,218	4,887,679	2.3110	0.6306
15	4,887,679	127,028	543,075	670,104	4,344,604		
16	4,344,604	112,914	543,075	655,990	3,801,528	2.3110	0.5105
17	3,801,528	98,800	543,075	641,875	3,258,453		
18	3,258,453	84,686	543,075	627,761	2,715,377	2.3110	0.3904
19	2,715,377	70,571	543,075	613,647	2,172,302		
20	2,172,302	56,457	543,075	599,533	1,629,226	2.3110	0.2703
21	1,629,226	42,343	543,075	585,418	1,086,151		
22	1,086,151	28,229	543,075	571,304	543,075	2.3110	0.1502
23	543,075	14,114	543,075	557,190	0	1.1555	0.0300



Period	Opening Balance	Markup	Repayment	Debt Service	Closing	Tariff Component	
						Principal	Markup
	Rs	Rs	Rs	Rs	Rs	Rs/KWh	Rs/KWh
1	3,080,998	197,492	171,167	368,659	2,909,832		
2	2,909,832	186,520	171,167	357,687	2,738,665	0.7284	0.8170
3	2,738,665	175,548	171,167	346,715	2,567,499		
4	2,567,499	164,577	171,167	335,743	2,396,332	0.7284	0.7237
5	2,396,332	153,605	171,167	324,771	2,225,166		
6	2,225,166	142,633	171,167	313,800	2,053,999	0.7284	0.6303
7	2,053,999	131,661	171,167	302,828	1,882,832		
8	1,882,832	120,690	171,167	291,856	1,711,666	0.7284	0.5369
9	1,711,666	109,718	171,167	280,884	1,540,499		
10	1,540,499	98,746	171,167	269,913	1,369,333	0.7284	0.4435
11	1,369,333	87,774	171,167	258,941	1,198,166		
12	1,198,166	76,802	171,167	247,969	1,026,999	0.7284	0.3502
13	1,026,999	65,831	171,167	236,997	855,833		
14	855,833	54,859	171,167	226,025	684,666	0.7284	0.2568
15	684,666	43,887	171,167	215,054	513,500		
16	513,500	32,915	171,167	204,082	342,333	0.7284	0.1634
17	342,333	21,944	171,167	193,110	171,167		
18	171,167	10,972	171,167	182,138	0	0.7284	0.0700

