No. NEPRA/TRF-378/BEL-2017/5813-5815
April 26, 2017

Subject: **Decision of the Authority in the Matter of Application for Unconditional Acceptance of Bagasse Upfront Tariff filed by Bahawalpur Energy Limited (BEL) for its 31.2 MW (Gross Capacity) New Bagasse Based Cogeneration Power Project at Ashraf Sugar Mills Ltd., Ashraf Abad, District Bahawalpur, Punjab (Case No. NEPRA/TRF-378/BEL-2017)**

Dear Sir,

Please find enclosed herewith the subject Decision of the Authority along with Annexure-I & II (12 pages) in Case No. NEPRA/TRF-378/BEL-2017.

2. The subject 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, 1997).

3. Order of the Authority at paragraph 3 of the Decision needs to be notified in the official Gazette.

Enclosure: As above

(Syed Safeer 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.

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DECISION OF THE AUTHORITY IN THE MATTER OF APPLICATION FOR UNCONDITIONAL ACCEPTANCE OF BAGASSE UPFRONT TARIFF FILED BY BAHAWALPUR ENERGY LIMITED (BEL) FOR ITS 31.2 MW (GROSS CAPACITY) NEW BAGASSE BASED COGENERATION POWER PROJECT AT ASHRAF SUGAR MILLS LIMITED, ASHRAF ABAD, DISTRICT BAHAWALPUR, PUNJAB.

National Electric Power Regulatory Authority (hereinafter referred to as the "Authority") vide its determination dated May 29, 2013, had approved Upfront Tariff for New Bagasse Based Co-Generation Power Projects (hereinafter referred to as the "upfront tariff") based on high pressure boilers (60 bars and above) with the terms and conditions mentioned therein, which were modified through the Authority's subsequent decisions dated August 28, 2013, June 19, 2014 and June 17, 2015. Bahawalpur Energy Limited (hereinafter referred to as the "applicant" or "BEL" or the "company") submitted application on January 30, 2017, for unconditional acceptance of the upfront tariff for its 31.2 MW (Gross capacity) high-pressure cogeneration power plant (hereinafter referred to as the "project") at Ashraf Sugar Mills Limited, Ashraf Abad District Bahawalpur, Punjab. In this regard, Central Power Purchasing Agency (Guarantee) Limited has indicated its consent vide letter No. CPPAGL/2017/CEO/BWEL/7945-49 dated March 15, 2017 to evacuate power from the project. The said application was scrutinized and found to be in compliance with the Terms and Conditions stipulated in the aforementioned decisions of the Authority and the requirements prescribed in Regulation 4 of the National Electric Power Regulatory Authority Upfront Tariff (Approval & Procedure) Regulations, 2011.
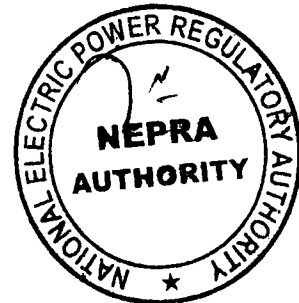
2. In view of the above, the Authority has decided to accept this application and has decided to grant upfront tariff to the applicant as follows:

3. **ORDER**

Pursuant to Rule 6 of the National Electric Power Regulatory Authority Licensing (Generation) Rules, 2000 read with Regulation 4(7) of NEPRA Upfront Tariff (Approval & Procedure) Regulations, 2011 and section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997, the applicant is allowed to charge the following approved tariff for delivery of electricity to the power purchaser:

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Tariff components	1-10 years (Rs/kWh)	11-30 years (Rs./kWh)	Indexations
Fuel Cost	5.7702	5.7702	Fuel price
Variable O&M Local	0.1074	0.1074	Local CPI
Variable O&M Foreign	0.3223	0.3223	PKR/US$, US CPI
Fixed O&M Local	0.2865	0.2865	Local CPI
Insurance	0.2204	0.2204	-
Working Capital	0.1924	0.1924	KIBOR
Debt Service	3.8249	-	KIBOR
Return on Equity	1.0155	1.0155	PKR/US$
Total	**11.7396**	**7.9147**	

i)   The above reference tariff is applicable for 30 years from commencement of commercial operation date (COD).

ii)   The above tariff has been worked out on the basis of reference PKR/US$ rate of Rs. 98.0.

iii) The reference component wise Upfront Tariff table is attached herewith as **Annex-I**

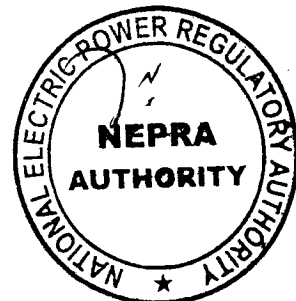iv)   The reference Debt Service schedule is attached herewith as **Annex-II**.

I.   Pass-Through Items

If the company is obligated to pay any tax on its income from generation of electricity, or any duties and/or taxes, not being of refundable nature, are imposed on the company up to the commencement of its commercial operations for import of its plant, machinery and equipment, the exact amount paid by the company on these accounts shall be reimbursed by the power purchaser on production of original receipts. This payment should be considered as a pass-through payment spread over a twelve months period. Furthermore, in such a scenario, the company shall also submit to the power purchaser details of any tax savings and the power purchaser shall deduct the amount of these savings from its payment to the company on account of taxation.

The adjustment for duties and/or taxes will be restricted only to the extent of duties and/or taxes directly imposed on the company. No adjustment for duties and/or taxes imposed on third parties such as contractors, suppliers, consultants, etc., excluding adjustment for taxes imposed on dividend as stated below, will be allowed.

Withholding tax on dividends will also be allowed as a pass through item just like other taxes. The power purchaser shall make payment on account of withholding tax at the

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time of actual payment of dividend, on production of original receipts, subject to maximum of 7.5% of 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. Adjustment for variation in tax rate on dividend from 7.5% shall also be allowed as a pass through item by the power purchaser, after satisfying itself that tax rates have actually varied. The company shall also submit to the power purchaser details of any tax savings and the power purchaser shall deduct the amount of these savings from its payment to the company on account of taxation.
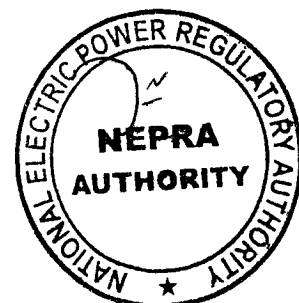
II. One-Time Adjustment

The reference Upfront Tariff will be adjusted on the reference date of May 31, 2015, to account for cost variations during the project construction period, and this adjustment will be applicable to the project upon achievement of commercial operations. The following adjustment in the reference Upfront tariff will be allowed.

i) The 40% of the approved total project cost has been assumed in foreign currency (USD) which shall be adjusted with respect to PKR/US$ exchange rate variation to be worked out on quarterly basis as per the assumed schedule of debt and equity injections spread over 20 months of project construction period starting from October 01, 2013 as given hereunder.

Debt & Equity Injections	Qtr.1	Qtr. 2	Qtr.3	Qtr. 4	Qtr.5	Qtr.6	2 months (after Qtr.6)	Total
% of total project cost	20%	20%	15%	15%	10%	10%	10%	100%

ii) The debt service component of reference Upfront Tariff will be adjusted on account of variation in quarterly KIBOR over the reference KIBOR of 9.50% plus spread on KIBOR at 3%.

iii) The return on equity component (ROE) including return on equity during construction component (ROEDC) of reference Upfront Tariff will be revised on

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account of variation in PKR/US$ exchange rate over the reference PKR/US$ exchange rate of Rs. 98.

III.   **Indexation/adjustment**

The following indexation shall be applicable to the reference tariff after one-time adjustment:

a)   **Fuel Cost Component**

Fuel cost component of tariff will be adjusted on account of variation in price of fuel (bagasse) on yearly basis in advance (w.e.f. 1st of October of each applicable year) as per the formula given hereunder.

$$FCC_{(Rev)} = FCC_{(Ref)} \times BFP_{(Rev)} / BFP_{(Ref)}$$

Where;

$FCC_{(Rev)}$ =   Revised fuel cost component of tariff for the applicable year.

$FCC_{(Ref)}$ =   Reference fuel cost component of tariff at the time of determination.

$BFP_{(Rev)}$ =   Revised price of bagasse in Rs/ton as determined in accordance with mechanism set out below.

$BFP_{(Ref)}$ =   Reference price of bagasse for the relevant year. Current reference price is Rs. 2861.12/ton

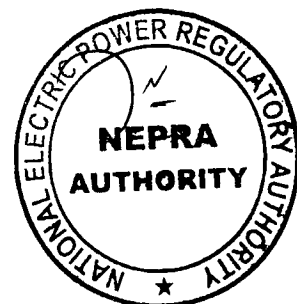$BFP_{(Rev)}$ = $CPCIF_{(Rev)} \times 6905/23810$

Where;

$CPCIF_{(Rev)}$ = $\{CPFOB_{(Rev)} + MF_{(Rev)} + MI_{(Rev)}\} \times ER_{(Rev)}$

Where;

$CPCIF_{(Rev)}$ =   Revised CIF price of coal in Rs/ton for the applicable year.

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| CPFOB $_{(Rev)}$ | = | Revised FOB price of coal expressed in US$/ton based on monthly average of prices published in the Argus McCloskey's API4 index for the relevant year. |

| MF$_{(Rev)}$ | = | Revised marine freight of coal per ton as worked out below. |

| MF$_{(Rev)}$ | = | US$ 19.19 x BIX$_{(Rev)}$ / BIX$_{(Ref)}$ |

Where;

| BIX$_{(Rev)}$ | = | Revised monthly average of the daily Bunker Index price for 380-CST published by the Bunker Index for the relevant year. |

| BIX$_{(Ref)}$ | = | Reference monthly average of the daily Bunker Index price of 380-CST published by the Bunker Index. Current reference for the month of April 2013 is US$ 641.8219/ton. |

| MI$_{(Rev)}$ | = | CPFOB$_{(Rev)}$ x 0.1% |

| ER$_{(Rev)}$ | = | Revised monthly average PKR/US$ exchange rate for the relevant month. |

The constants such as 6905, 23810 and US$ 19.19 are fixed values representing LHV value of Bagasse in Btu/kg, LHV value of coal in Btu/kg and fixed value of marine freight charges per ton of coal respectively.

Note:

1. Applicable year means, the year for which adjustment/indexation of fuel cost component is required starting from 1st of July and ending on 30th of June.
2. Relevant year means the year immediately preceding the applicable year for adjustment/indexation of fuel cost component.

b) <u>O&M Cost Component</u>

The local O&M component will be adjusted on account of local Inflation and foreign O&M component will be adjusted on account of variation in Rupee/Dollar exchange rate and US CPI. Quarterly adjustments for inflation and exchange rate variation will be made on 1st July, 1st October, 1st January & 1st April respectively on the basis of the

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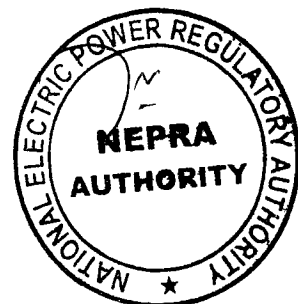
latest available information with respect to Pakistan CPI (general), US CPI (notified by US bureau of labor statistics) and revised TT&OD Selling rate of US Dollar (notified by the National Bank of Pakistan). The mode of indexation will be as under:

i) **Fixed O&M Local**

$$F\ O\&M_{(REV)} = F\ O\&M_{(REF)} * CPI_{(REV)} / CPI_{(REF)}$$

Where:

$F\ O\&M_{(REV)}$ = The revised applicable Fixed O&M local component of tariff indexed with Pakistan CPI.

$F\ O\&M_{(REF)}$ = The reference fixed O&M local component of tariff for the relevant period.

$CPI_{(REV)}$ = The Revised Consumer Price Index (General) for the relevant month.

$CPI_{(REF)}$ = The Consumer Price Index (General) of April 2013 notified by the Federal Bureau of Statistics, i.e. 177.74.

ii. **Variable O&M**

$$V\ O\&M_{(LREV)} = V\ O\&M_{(LREF)} * CPI_{(REV)} / CPI_{(REF)}$$

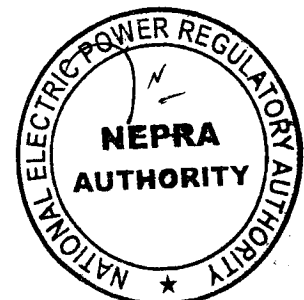$$V\ O\&M_{(FREV)} = V\ O\&M_{(FREF)} * USCPI_{(REV)} / US\ CPI_{(REF)} * ER_{(REV)}/98$$

Where:

$V\ O\&M_{(LREV)}$ = The revised applicable Variable O&M local component of tariff indexed with CPI.

$V\ O\&M_{(FREV)}$ = The revised applicable Variable O&M foreign component of tariff indexed with US CPI and exchange rate variation.

$V\ O\&M_{(LREF)}$ = The reference variable O&M local component of tariff for the relevant period.

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V O&M (FREF)   = The reference variable O&M foreign component of tariff for the relevant period.

CPI (REV)   = The Revised Consumer Price Index (General) for the relevant month.

CPI (REF)   = The Consumer Price Index (General) of April 2013 notified by the Federal Bureau of Statistics, i.e. 177.74.

US CPI (REV) = The Revised US Consumer Price Index (All Urban Consumers) notified by the US Bureau of Labor Statistics.

US CPI (REF) = Reference US CPI (All Urban Consumers) notified by the Bureau of Labor Statistics for the month of April 2013, i.e. 232.531.

ER(REV)   = The revised TT&OD selling rate of US dollar as notified by the National Bank of Pakistan.

c)   <u>Adjustment of working capital cost</u>

The cost of working capital shall be adjusted on account of variation in 3-month KIBOR over the reference KIBOR of 9.50% while premium over KIBOR, 2% remaining the same for the entire tariff control period.

d)   <u>Adjustment of debt servicing component</u>

This fixed charge component after one-time adjustment will remain unchanged throughout the tariff control period except for the adjustment due to variation in KIBOR. The debt servicing component of tariff will be adjusted accordingly on quarterly basis.

e)   <u>Return on Equity</u>

Return on equity (ROE) as well as Return on Equity during Construction (ROEDC) component of tariff shall be adjusted for variation in PKR/US$ exchange rate according to the following formula:

$$ROE_{(REV)} = ROE_{(REF)} * ER_{(REV)}/ER_{(REF)}$$

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ROEDC $_{(REV)}$ = ROEDC $_{(REF)}$ * ER $_{(REV)}$/ER $_{(REF)}$

Where;

ROE $_{(REV)}$ = Revised Return on Equity component of tariff expressed in Rs/kWh adjusted with exchange rate variation.

ROEDC $_{(REV)}$ = Revised Return on Equity during Construction component of tariff in Rs/kWh adjusted with exchange rate variation.

ROE $_{(REF)}$ = Reference Return on Equity component of tariff expressed in Rs/kWh for the relevant period.

ROEDC $_{(REF)}$ = Reference Return on Equity during Construction component of tariff expressed in Rs/kWh for the relevant period.

ER $_{(REV)}$ = Revised TT and OD selling rate of US dollar as notified by the National Bank of Pakistan.

ER $_{(REF)}$ = Reference TT and OD selling rate of US dollar.

IV.   Terms and conditions of Upfront Tariff

i)   The Upfront tariff is applicable for power generation using bagasse.

ii)   The Upfront Tariff will be applicable and become effective after Commercial Operation Date (COD) of the project.

iii)   The decision of the applicant to opt for upfront tariff is irrevocable.

iv)   The applicant is required to achieve COD within two years from date of issuance of this order.

v)   All energy offered for sale by the project shall be taken by the power purchaser on priority.

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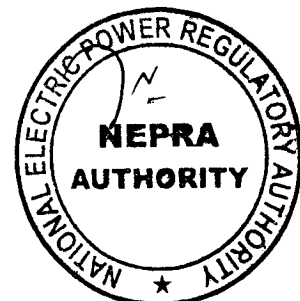
vi) The applicant shall have the option to offer energy to the respective Distribution Company (DISCO) at 11 KV or 132 KV, or to the CPPA/NTDC at 132 KV, provided that the cost of interconnection, grid station upgrades etc. for power evacuation shall be incurred by the respective DISCO/NTDC.

vii) This tariff will be applicable for a period of thirty years (30) from the commencement of commercial operations.

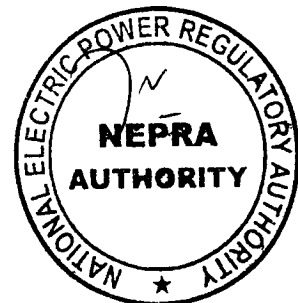viii) In the Upfront Tariff no adjustment for certified emission reductions has been accounted for. However, upon actual realization of carbon credits, the same shall be distributed between the power purchaser and the company in accordance with the Policy for Development of Renewable Energy for Power Generation 2006, as amended from time to time.

ix) The project is allowed the use of other biomass fuel such as rice husk, cotton stalk etc. in combination with Bagasse or separately. However use of coal imported or local is not allowed.

x) Pre COD sale of electricity is allowed to the applicant, subject to the terms and conditions of PPA, at the applicable tariff excluding principal repayment of debt component and interest component.

xi) To safeguard interest of consumers, the Authority may review the fuel pricing mechanism stipulated above in accordance with NEPRA applicable law, after due consultation with the affected/interested parties, if it is deemed that there is exorbitant/unreasonable increase in international coal prices. Similarly, to mitigate risk to the power producer and to encourage the investors to put up bagasse based(indigenous fuel) cogeneration projects, the reference CIF coal price of US$ 100.67/ton used at the time of this determination shall be considered the floor/minimum price for the purpose of the Fuel cost Component.

xii) The adjustment/indexation of upfront tariff will be made on the basis of benchmarks assumed by the Authority for Upfront Tariff in accordance with the indexation mechanism stipulated hereinabove. No project specific adjustments shall be taken into account.

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4.   The EPA/PPA executed shall be consistent with all applicable documents including Generation License and NEPRA's Tariff determination for the power producer. Any provision of PPA/EPA which is inconsistent with NEPRA's Tariff Determination shall be void to that extent and its financial impact shall not be passed on to the end consumer.

5.   The order at paragraph 3 is 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

(Himayat Ullah Khan)
Member

(Syed Masood ul Hassan Naqvi)
Member

(Maj. (R) Haroon Rasheed)
Member

(Saif Ullah Chattha)
Member/ Vice Chairman

24.4.2017

(Tariq Saddozai)
Chairman

26-4-17

Reference Upfront Tariff for 31.2 MW BEL Co-generation Power Project

Year	Fuel cost component Rs./kWh	Variable O&M Local Rs./kWh	Variable O&M Foreign Rs./kWh	Fixed O&M Local Rs. / kWh	Insurance Rs. / kWh	Working capital cost Rs. / kWh	Return on Equity Rs. / kWh	ROE During Construction Rs. / kWh	Loan Repayment Rs. / kWh	Interest Charges Rs./kWh	Total Tarif Rs. / kWh
1	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948	1.1705	2.6544	11.7396
2	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948	1.3238	2.5011	11.7396
3	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948	1.4972	2.3277	11.7396
4	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948	1.6933	2.1316	11.7396
5	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948	1.9150	1.9098	11.7396
6	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948	2.1659	1.6589	11.7396
7	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948	2.4496	1.3752	11.7396
8	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948	2.7704	1.0544	11.7396
9	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948	3.1333	0.6915	11.7396
10	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948	3.5437	0.2811	11.7396
11	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948			7.9147
12	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948			7.9147
13	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948			7.9147
14	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948			7.9147
15	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948			7.9147
16	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948			7.9147
17	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948			7.9147
18	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948			7.9147
19	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948			7.9147
20	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948			7.9147
21	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948			7.9147
22	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948			7.9147
23	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948			7.9147
24	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948			7.9147
25	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948			7.9147
26	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948			7.9147
27	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948			7.9147
28	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948			7.9147
29	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948			7.9147
30	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948			7.9147
Levelized Tariff	5.7702	0.1074	0.3223	0.2865	0.2204	0.1924	0.9207	0.0948	1.2831	1.2100	10.4078
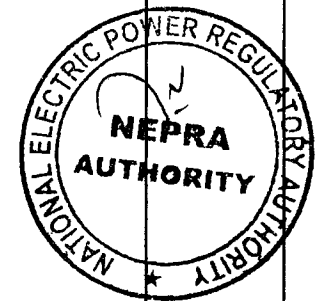
Levelized Tariff (1-30 years) discounted at 10% per annum = US Cents 10.6202/kWh at reference exchange rate of 1US$=Rupees 98.00.

Reference Upfront Tariff for 31.2 MW BEL Co-generation Power Project
Debt Servicing Schedule

Period	Local Debt Principal Million $	Repayment Million $	Mark-Up Million $	Balance Million $	Debt Service Million $	Local Debt Principal Million Rupees	Repayment Million Rupees	Mark-Up Million Rupees	Balance Million Rupees	Debt Service Million Rupees	Annual Principal Repayment Rs./kWh	Annual Interest Rs./kWh	Annual Debt Service Rs./kWh
	0.7973	0.0103	0.0249	0.7870	0.0352	78.1353	1.0072	2.4417	77.1281	3.4490			
	0.7870	0.0106	0.0246	0.7764	0.0352	77.1281	1.0387	2.4103	76.0893	3.4490			
	0.7764	0.0109	0.0243	0.7655	0.0352	76.0893	1.0712	2.3778	75.0182	3.4490			
	0.7655	0.0113	0.0239	0.7542	0.0352	75.0182	1.1046	2.3443	73.9135	3.4490			
1	0.7973	0.0431	0.0977	0.7542	0.1408	78.1353	4.2218	9.5741	73.9135	13.7958	1.1705	2.6544	3.8248
	0.7542	0.0116	0.0236	0.7426	0.0352	73.9135	1.1392	2.3098	72.7744	3.4490			
	0.7426	0.0120	0.0232	0.7306	0.0352	72.7744	1.1748	2.2742	71.5996	3.4490			
	0.7306	0.0124	0.0228	0.7182	0.0352	71.5996	1.2115	2.2375	70.3881	3.4490			
	0.7182	0.0127	0.0224	0.7055	0.0352	70.3881	1.2493	2.1996	69.1388	3.4490			
2	0.7542	0.0487	0.0921	0.7055	0.1408	73.9135	4.7747	9.0211	69.1388	13.7958	1.3238	2.5011	3.8248
	0.7055	0.0131	0.0220	0.6924	0.0352	69.1388	1.2884	2.1606	67.8504	3.4490			
	0.6924	0.0136	0.0216	0.6788	0.0352	67.8504	1.3286	2.1203	66.5218	3.4490			
	0.6788	0.0140	0.0212	0.6648	0.0352	66.5218	1.3702	2.0788	65.1516	3.4490			
	0.6648	0.0144	0.0208	0.6504	0.0352	65.1516	1.4130	2.0360	63.7387	3.4490			
3	0.7055	0.0551	0.0857	0.6504	0.1408	69.1388	5.4001	8.3957	63.7387	13.7958	1.4972	2.3277	3.8248
	0.6504	0.0149	0.0203	0.6355	0.0352	63.7387	1.4571	1.9918	62.2815	3.4490			
	0.6355	0.0153	0.0199	0.6202	0.0352	62.2815	1.5027	1.9463	60.7789	3.4490			
	0.6202	0.0158	0.0194	0.6044	0.0352	60.7789	1.5496	1.8993	59.2293	3.4490			
	0.6044	0.0163	0.0189	0.5881	0.0352	59.2293	1.5980	1.8509	57.6312	3.4490			
4	0.6504	0.0623	0.0785	0.5881	0.1408	63.7387	6.1075	7.6884	57.6312	13.7958	1.6933	2.1316	3.8248
	0.5881	0.0168	0.0184	0.5713	0.0352	57.6312	1.6480	1.8010	55.9832	3.4490			
	0.5713	0.0173	0.0179	0.5539	0.0352	55.9832	1.6995	1.7495	54.2838	3.4490			
	0.5539	0.0179	0.0173	0.5360	0.0352	54.2838	1.7526	1.6964	52.5312	3.4490			
	0.5360	0.0184	0.0168	0.5176	0.0352	52.5312	1.8074	1.6416	50.7238	3.4490			
5	0.5881	0.0705	0.0703	0.5176	0.1408	57.6312	6.9074	6.8884	50.7238	13.7958	1.9150	1.9098	3.8248
	0.5176	0.0190	0.0162	0.4986	0.0352	50.7238	1.8638	1.5851	48.8600	3.4490			
	0.4986	0.0196	0.0156	0.4790	0.0352	48.8600	1.9221	1.5269	46.9379	3.4490			
	0.4790	0.0202	0.0150	0.4587	0.0352	46.9379	1.9822	1.4668	44.9557	3.4490			
	0.4587	0.0209	0.0143	0.4379	0.0352	44.9557	2.0441	1.4049	42.9116	3.4490			
6	0.5176	0.0797	0.0611	0.4379	0.1408	50.7238	7.8122	5.9837	42.9116	13.7958	2.1659	1.6589	3.8248
	0.4379	0.0215	0.0137	0.4164	0.0352	42.9116	2.1080	1.3410	40.8037	3.4490			
	0.4164	0.0222	0.0130	0.3942	0.0352	40.8037	2.1738	1.2751	38.6298	3.4490			
	0.3942	0.0229	0.0123	0.3713	0.0352	38.6298	2.2418	1.2072	36.3880	3.4490			
	0.3713	0.0236	0.0116	0.3477	0.0352	36.3880	2.3118	1.1371	34.0762	3.4490			
7	0.4379	0.0902	0.0506	0.3477	0.1408	42.9116	8.8354	4.9604	34.0762	13.7958	2.4496	1.3752	3.8248
	0.3477	0.0243	0.0109	0.3234	0.0352	34.0762	2.3841	1.0649	31.6921	3.4490			
	0.3234	0.0251	0.0101	0.2983	0.0352	31.6921	2.4586	0.9904	29.2335	3.4490			
	0.2983	0.0259	0.0093	0.2724	0.0352	29.2335	2.5354	0.9135	26.6981	3.4490			
	0.2724	0.0267	0.0085	0.2457	0.0352	26.6981	2.6146	0.8343	24.0835	3.4490			
8	0.3477	0.1020	0.0388	0.2457	0.1408	34.0762	9.9927	3.8031	24.0835	13.7958	2.7704	1.0544	3.8248
	0.2457	0.0275	0.0077	0.2182	0.0352	24.0835	2.6964	0.7526	21.3871	3.4490			
	0.2182	0.0284	0.0068	0.1899	0.0352	21.3871	2.7806	0.6683	18.6065	3.4490			
	0.1899	0.0293	0.0059	0.1606	0.0352	18.6065	2.8675	0.5815	15.7390	3.4490			
	0.1606	0.0302	0.0050	0.1304	0.0352	15.7390	2.9571	0.4918	12.7819	3.4490			
9	0.2457	0.1153	0.0255	0.1304	0.1408	24.0835	11.3016	2.4943	12.7819	13.7958	3.1333	0.6915	3.8248
	0.1304	0.0311	0.0041	0.0993	0.0352	12.7819	3.0495	0.3994	9.7324	3.4490			
	0.0993	0.0321	0.0031	0.0672	0.0352	9.7324	3.1448	0.3041	6.5875	3.4490			
	0.0672	0.0331	0.0021	0.0341	0.0352	6.5875	3.2431	0.2059	3.3444	3.4490			
	0.0341	0.0341	0.0011	(0.0000)	0.0352	3.3444	3.3444	0.1045	0.0000	3.4490			
10	0.1304	0.1304	0.0103	(0.0000)	0.1408	12.7819	12.7819	1.0139	0.0000	13.7958	3.5437	0.2811	3.8248