



National Electric Power Regulatory Authority

Islamic Republic of Pakistan

Registrar

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Web: www.nepa.org.pk, E-mail: registrar@nepa.org.pk

No. NEPRA/PAC-122/1238-1240
January 27, 2015

Subject: Approval of Power Acquisition Contract filed by Faisalabad Electric Supply Company Ltd. (FESCO) for Purchase of 4 MW from Noon Sugar Mills Limited (NSML) under NEPRA Interim Power Procurement (Procedures and Standards) Regulations, 2005 [Case # PAC-122]

Dear Sir,

Please find enclosed herewith the subject Approval of the Authority (07 pages) in Case No. NEPRA/PAC-122.

2. The Approval is being intimated to the Federal Government for the purpose of notification in the official gazette in accordance with the provisions of Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997).
3. Please note that Order of the Authority at para 7 of the Decision needs to be notified in the official Gazette.

Enclosure: As above


(Syed Safer Hussain)^{27.1.15}

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

CC:

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



National Electric Power Regulatory Authority
(NEPRA)

Approval of

Power Acquisition Contract filed by

Faisalabad Electric Power Company (FESCO)

For Purchase of 4 MW from Noon Sugar Mills Limited (NSML)

Under

Interim Power Procurement (Procedures & Standards) Regulations 2005

(NO: NEPRA/PAC-122)

Islamabad

January 27, 2015



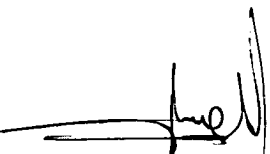
Approval of the Authority in the Matter of Power Acquisition Contract filed by Faisalabad Electric Supply Company (FESCO) for Purchase of 4 MW from Noon Sugar Mills Limited (NSML) under Interim Power Procurement (Procedures & Standards) Regulations 2005

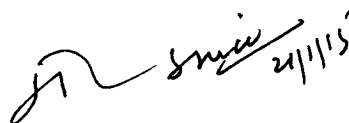
(NO: NEPRA/PAR- 122/PAC)

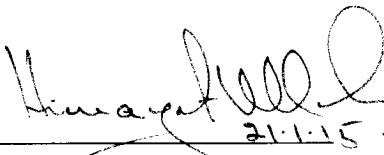
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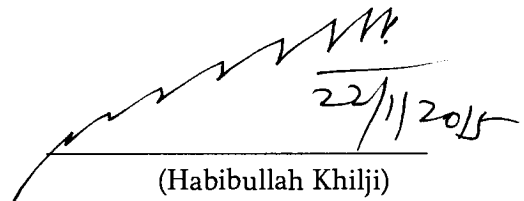
Faisalabad Electric Supply Company (FESCO) Canal Road Abdullahpur, Faisalabad, Pakistan.


AUTHORITY

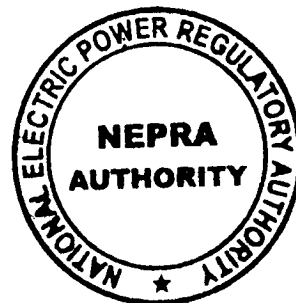

15 07 XV
(Khawaja Muhammad Naeem)
Member

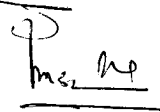

21/1/15
(Maj. Rtd. Haroon Rashid)
Member


21.1.15
(Himayat Ullah Khan)
Member

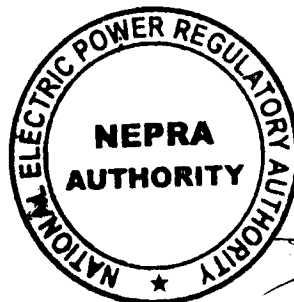

22/1/2015
(Habibullah Khilji)
Vice Chairman


Brig. (R) Tariq Saddozai
Chairman




27.01.15

1. Based on the Power Acquisition Request of the Faisalabad Electric Supply Company Limited (FESCO) NEPRA in accordance with the Regulation 4(1) of the Interim Power Procurement (Procedure & Standards) Regulations – 2005 (hereinafter “IPPR-2005”) granted permission to FESCO vide letter No. NEPRA/R/PAR-122/7643 dated 03-07-2014 for negotiating Power Acquisition Contract with the Noon Sugar Mills. FESCO was also directed to submit the draft PAC for approval of the Authority in accordance with the provision of Regulation 5(1) of the IPPR-2005. Accordingly FESCO vide letter dated 6.8.2014 submitted the subject negotiated power purchase agreement in respect of procurement of 4 MW bagasse based generation from Noon Sugar Mills Limited (NSML) for further necessary action.
2. The request was not in line with the Regulation 5(1) & 5(3) of the IPPR-2005 therefore FESCO was advised to provide the details in the matter. In response FESCO vide letter dated 2-10-2014 requested to allow the tariff allowed in the cases of Ramzan Sugar Mills (Pvt) Limited and Shakarganj Sugar Mills (Pvt) Limited, supplying power to FESCO. The tariff indicated by FESCO was Rs. 5.15 /kWh on energy delivered basis comprising of Fuel Cost Component of Rs.3.62/kWh, based upon Reference Gas Price of Rs. 238.38/MMBTU and Fixed Cost Component of Rs.1.53/kWh excluding General Sales Tax (GST).
3. NEPRA has granted a Generation License (No. SGC/94-2013 dated 29.11.2013 to NSML for its 14.80 MW (Gross) Bagasse based captive power plant located at Bhalwal, District Sargodha, Punjab. FESCO requirement for procurement is 4 MW.
4. **Proceedings:**
 - 4.1 The request was admitted for consideration on 18.11.2014. In order to examine the prudence of the power acquisition and the agreed terms and conditions as per the Section 7(3)(a) of NEPRA Act read with the provisions of IPPRs a detailed exercise was carried out by the Authority in similar cases. In this regard the tariffs of the regional countries were also compared in addition to the benchmarks established by the Authority in similar technology.
 - 4.2 The findings, analysis and decisions of the authority on different aspects / ingredients of the tariff, negotiated and agreed between FESCO & NSML is provided in the succeeding paragraphs.
5. **Fuel Cost Component**
 - 5.1 Considering the existing demand supply gap, RFO prices and its impact on exchange rate, non-availability of electricity impact on economy, unemployment etc, the Authority considers that the alternative resources which are producing electricity on lower rates as compared to the RFO and HSD etc based generation needs to be encouraged. The Authority further considers that the generation on bagasse being an indigenous fuel has great importance with respect to energy security of the country. Moreover, this is not only a comparatively cheaper source of generation but also contributes in reducing demand supply gap during winter season, when hydel generation is at its minimum due to canal closure. The bagasse based generation attributes in lowering the basket price; thus ultimately reduces the consumer-end tariff.



5.2 The Authority after consultative process linked the indexation of the fuel cost component with coal price mechanism prescribed in the Upfront Tariff for co-generation power plants. The decision dated 14-12-2012 and 28-2-2014 with respect to Ramzan Sugar Mills and Shakarganj Sugar Mills were accordingly modified in November 2014. The approved tariff for the bagasse based captive power plants is as under:

- Fuel Cost Component	Rs. 6.29/kWh
- Fixed Cost Component	Rs. 1.53/kWh
Total	Rs. 7.82

5.4 Since FESCO has requested to allow the tariff in line with the Ramzan Sugar Mills and Shakarganj Sugar Mills Limited therefore the Authority has decided to allow the same tariff in the instant case. As a matter of consistency, the CIF coal price of US\$ 100.67/ton on which the bagasse price of Rs. 28,61/M.Ton has been calculated in the Upfront Tariff of Co-generation power plants shall be considered as floor / minimum price for the purpose of the Fuel Cost Component. The Authority may review the fuel pricing mechanism stipulated below in accordance with NEPRA Rules and after consultation with the affected parties if it is deemed that there is exorbitant/unreasonable increase in international coal prices. The fuel cost component adjustment mechanism is given hereunder:

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 of Rs. 6.29/kWh.

$BFP_{(Rev)}$ = 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

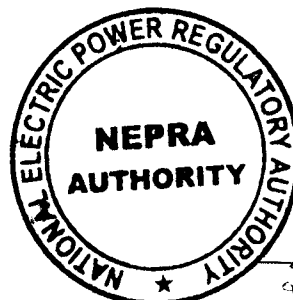
$BFP_{(Rev)}$ = $CPCIF_{(Rev)} \times 6905/23810$

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.



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.

5.5 FESCO is directed to incorporate the above modification in the draft PAC.

6. Fixed Cost Component

FESCO and NSML have agreed Rs. 1.53/kWh as fixed cost component. The Authority in other similar cases considering the fixed cost component being reasonable allowed the same. The Authority therefore decided to allow the same in the instant case.

7. ORDER

7.1 For the foregoing reasons, the draft Power Acquisition Contract (PAC) submitted by Faisalabad Electric Supply Company (FESCO) for procurement of 4 MW power from Noon Sugar Mills Limited (NSML) is hereby approved under Regulation 5 of NEPRA Interim Power Procurement (Procedure & Standards) Regulations 2005 with the following modifications and terms and conditions. The procurement of power shall be on take and pay basis.

Reference Tariff

Description	Rs. / kWh
Fuel Cost Component	6.29
Fixed Cost Component	1.53
Total Generation Cost of delivered unit	7.82



7.2 The CIF coal price of US\$ 100.67/ton on which the bagasse price of Rs. 28,61/M.Ton has been calculated, shall be considered as floor / minimum price for the purpose of the Fuel Cost Component. The Authority may review the fuel pricing mechanism stipulated below in accordance with NEPRA Rules and after consultation with the affected parties if it is deemed that there is exorbitant/unreasonable increase in international coal prices. The fuel cost component adjustment mechanism is given hereunder:

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 of Rs. 6.29/kWh.

$BFP_{(Rev)}$ = 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.

$CPFOB_{(Rev)}$ = 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.

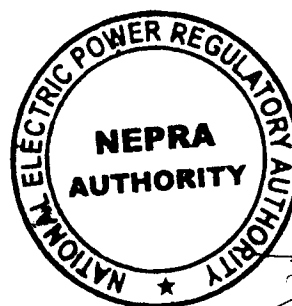
$MF_{(Rev)}$ = $US\$ 19.19 \times BIX_{(Rev)} / BIX_{(Ref)}$

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.

$MI_{(Rev)}$ = $CPFOB_{(Rev)} \times 0.1\%$





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.

7.3 The above Order is to be notified in the official gazette in accordance with the provisions of Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act 1997.

