



Registrar

National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/PAR-106/1998-2000
February 28, 2014

Subject: **Approval of the Authority in the matter of Power Acquisition Request filed by Sukkur Electric Power Company Ltd. (SEPCO) for Purchase of 4 MW from Deharki Sugar Mills (Pvt.) Limited (DSML) under NEPRA Interim Power Procurement (Procedures and Standards) Regulations, 2005 [Case # PAR-106]**

Dear Sir,

Please find enclosed herewith the subject Approval of the Authority (06 pages) in Case No. NEPRA/PAR-106.

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's Approval needs to be notified in the official Gazette.

Enclosure: As above


(Syed Safer Hussain)

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

CC:

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



National Electric Power Regulatory Authority
(NEPRA)

Approval of

Power Acquisition Request filed by

Sukkur Electric Power Company (SEPCO)

For Purchase of 4 MW from Deharki Sugar Mills Limited (DSML)

Under

Interim Power Procurement (Procedures & Standards) Regulations 2005

(NO: NEPRA/PAR-106)

Islamabad

February 28th, 2014



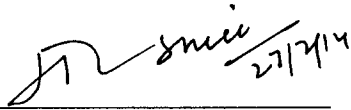
Approval of the Authority in the Matter of Power Acquisition Request filed by Sukkur Electric Power Company (SEPCO) for Purchase of 4 MW from Deharki Sugar Mills Limited (DSML) under Interim Power Procurement (Procedures & Standards) Regulations 2005

(NO: NEPRA/PAR- 106)

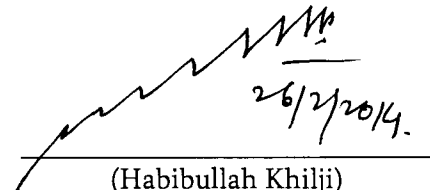
FILED BY

Sukkur Electric Power Company (SEPC), Thermal Power Station, Old Sukkur, Sukkur.

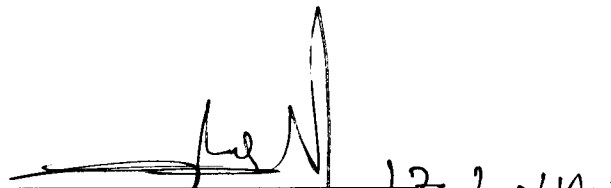
AUTHORITY


27/2/14

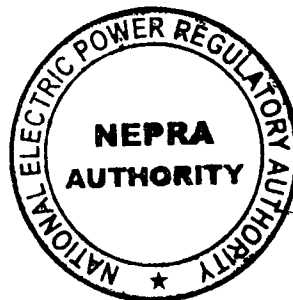
(Major. (R) Haroon Rashid)
Member

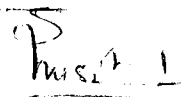

26/2/2014.

(Habibullah Khilji)
Member


22-2-14

(Khawaja Muhammad Naeem)
Vice Chairman




28.02.14

1. Sukkur Electric Power Company (SEPCO), vide letter dated 19.12.2012 submitted a Power Acquisition Request (PAR) in respect of procurement of 4 MW bagasse based power from M/s Deharki Sugar Mills Limited (DSML), under NEPRA Interim Power Procurement (Standards & Procedure) Regulations, 2005 (the "Regulations"). SEPCO stated that "*SEPCO is purchasing upto 4 MW Bagasse Based Power from M/s Deharki Sugar Mills Limited, Kamoo Shaheed, Ubauro under SPP on take and pay basis and hereby request for acquisition of power under IPPR-2005 (Interim Power Procurement (Procedure & Standards) Regulations 2005 to regularize the power purchase as per NEPRA Rules.*"

2. SEPCO also submitted a copy of PPA dated 19.01.2012 executed between SEPCO and Deharki Sugar Mills Limited as per clause 5(1) of Regulation. SEPCO has requested as below:

"SEPCO is of the view that Tariff determination is the prerogative of NEPRA in this case, however if NEPRA has no objection on the Tariff, approved by CPPA for CPs / SPPs (Small Power Producers) as mentioned above, SEPCO can adopt and own the Tariff. SEPCO will appreciate if permission for power acquisition is allowed along with endorsement of Tariff adopted by CPPA under SPP policy or Tariff determination be made by NEPRA as the case may be."

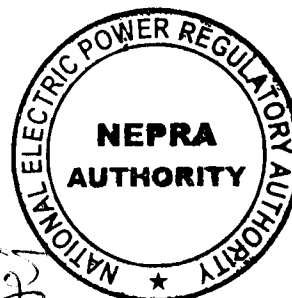
3. SEPCO was directed to provide approval by the Board of Directors (BOD) and power of attorney in favour of signatory officer of the PAR. SEPCO vide letter dated 12.02.2014 provided the copy of the special resolution. According to Chief Technical Officer the SEPCO board has approved the Item Note for Purchase of Electric Power for 08 MW from M/s Deharki Sugar Mills, Kamoo Shaheed Ubauro, through special resolution vide letter No. CEO/SEPCO/B-40/77-99 dated 12.02.2014.

4. DSML is a bagasse based co-generation power plant. NEPRA has granted a Generation License No. SGC/74/2011 dated 29.7.2011 to DSML for its 12 MW bagasse based captive power plant located at Kamoo Shahed, Ubauro, District Ghotki, province of Sindh. DSML in accordance with the Regulation 10 of the NEPRA Licensing (Application & Modification Procedure) Regulation, 1999 (the Regulation), communicated a License Proposed Modification (LPM) on 13.11.2012. DSML requested to enhance the capacity from 12 to 18 MW. In pursuance to Regulation 10(11) of the NEPRA Regulations the LPM of the DSML was approved on 15.07.2013.

5. Proceedings:

5.1 The Authority on 28.3.2013 admitted the PAR submitted by SEPCO. The Authority considering the demand supply gap decided to grant permission to all DISCOs to procure power from the bagasse based small power plants on the following conditions:

- i. The power plant should hold a valid generation licence.
- ii. The Power Acquisition Request for such purchase should be filed by the concerned DISCOs / CPPA with NEPRA prior to starting such purchases.
- iii. DISCOs / CPPA should take a declaration on legal paper from power seller that it will settle the claims of its sold electricity as per the rate and terms and conditions as approved by the Authority.



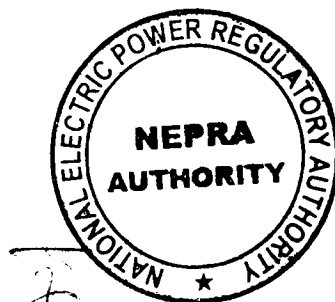
- 5.2 The IPPRs do not require for giving public Notice of Admission / public hearing of PAR seeking comments/replies but in order to meet the ends of natural justice, notice of admission/public hearing with the title and brief description of the PARs filed with respect to similar technologies were published in the national newspapers. Individual letters were also sent to the stakeholders. The Authority in the similar cases of bagasse based power projects carried out the detailed analysis and due diligence. Since, the Authority has already carried out its due diligence in the similar cases; therefore the Authority decided not to conduct the hearing in the instant case.
- 5.3 Pursuant to regulation 5(1) of the IPPRs, before executing a power acquisition contract, a DISCO is required to file its proposed contract for its approval by the Authority. SEPCO, along with the PAR also submitted the proposed Power Purchase Agreement (PPA) for the approval of the Authority.
- 5.4 The agreed tariff is 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).

6. Prudency of Tariff:

- 6.1 In order to examine the prudency 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.
- 6.2 The findings, analysis and decisions of the authority on different aspects / ingredients of the tariff, negotiated and agreed between SEPCO & DSML is provided in the succeeding paragraphs.

7. Fuel Cost Component

- 7.1 Considering the existing demand supply gap, increasing trend in RFO price and its impact on exchange rate, affect of non-availability of electricity 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. Furthermore, these power plants are not only using indigenous fuel (bagasse) to produce electricity but also the rates of electricity supplied by such plants are on lower side as compared to the electricity produced by RFO and HSD based power plant. The bagasse based generation attributes in lowering the basket price; thus ultimately reduces the consumer-end tariff.
- 7.2 In order to analyze the prudency of the tariff requested by SEPCO, the fuel cost component indicated by CPPA and agreed in the PPA, (At Reference Gas Price of Rs. 238.38/MMBTu =



Rs.3.62/kWh and at current gas price of Rs. 573.28/MMBtu worked out as Rs. 8.7057/kWh) was analyzed to assess the efficiency at which this component was calculated. Accordingly, a detailed study of the cogeneration bagasse-based power plants based on the available information in the neighboring countries was carried out. Based on the detailed study and keeping in view the above facts, the fuel cost component being reasonable was allowed to the bagasse based power projects i.e. Shakarganj, RYK Mills, Ashraf Sugar Mills, Kamalia etc.

- 7.3 The Authority while approving the PARs filed by the different Distribution Company allowed the same mechanism for indexation of the fuel cost component with the gas price which was existed in their PPA. The Authority considers that in order to ensure consistency, the existing agreed fuel price adjustment mechanism needs to be revisited. In this regard the Authority will carry out separate exercise based on which the existing mechanism of fuel price adjustment will be revised for all the bagasse based co-generation captive plants. Since the revision of the adjustment mechanism after consultation with the stakeholder would require considerable time therefore for the time being, the Authority has decided to allow the same fuel cost component with the same adjustment mechanism which has been allowed to other bagasse based power plants. The adjustment mechanism of the energy component is given hereunder:

$$FCC_{(Rev)} = GP_{(Rev)} / GP_{(Ref)} * FCC_{(Ref)}$$

Where:

FCC_(Rev) = Fuel Cost Component applicable for the Billing Cycle

GP_(Rev) = Revised HHV Gas Price per MMBtu net of GST for the Billing Cycle as notified by OGRA for Captive power stations

GP_(Ref) = Reference Gas Price i.e Rs. 238.38 / MMBTU (HHV)

FCC_(Ref) = Rs. 3.62/ kWh

- 7.4 SEPCO is directed to incorporate modification in its PPA in accordance with above fuel cost component adjustment mechanism.

8. Fixed Cost Component

SEPCO and DSML 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. However, in the instant case the fixed cost component definition needs to be amended as per the definition allowed in the previous cases which is as under:

"Fixed Cost Component" — The tariff component payable @ Rupees 1.53 per kWh delivered, by the Company which included but not limited to O&M cost, tax on income of the Company, insurance cost, return on investment, duties etc. This component will remain fixed till the expiry of this contract."



9. ORDER

- 9.1 In pursuance of the Regulation 4(1) of the NEPRA Interim Power Procurement (Procedure & Standards) Regulations 2005, Sukkur Electric Power Company (SEPCO) is granted permission for acquisition upto 4 MW power from Deharki Sugar Mills Limited (DSML) on take and pay basis. In pursuance of Regulation 5 of the Regulation of IPPR-2005 read with Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997, the power acquisition contract is hereby approved. The approved rates shall be applicable from the date of grant of generation license to DSML.

Reference Tariff

Description	Rs. / kWh
Fuel Cost Component	3.62
Fixed Cost Component	1.53
Total Generation Cost of delivered unit	5.15

- 8.2 Till revision of the indexation mechanism of fuel cost component of the bagasse based power generation plants, the fuel cost component shall be adjusted according to the following formula:

$$FCC_{(Rev)} = GP_{(Rev)} / GP_{(Ref)} * FCC_{(Ref)}$$

Where:

FCC (Rev) = Fuel Cost Component applicable for the Billing Cycle

GP (Rev) = Revised HHV Gas Price per MMBtu net of GST for the Billing Cycle as notified by OGRA for Captive power stations

GP (Ref) = Reference Gas Price i.e Rs. 238.38 / MMBTU (HHV)

FCC (Ref) = Rs. 3.62/ kWh

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.

