

**Bihar Electricity Regulatory Commission
Patna**

Case No. FPPCA 11/2011

In the matter of

Fuel and Power Purchase Cost Adjustment (FPPCA) charges for the month of October, 2011 (01.10.2011 to 31.10.2011)

AND

In the matter of

Bihar State Electricity Board Applicant

**Present : U. N. Panjjar – Chairman
R. N. Sharma – Member
S. C. Jha – Member**

Dated: 28/12/2011

ORDER

1. The Bihar State Electricity Board [hereinafter referred to as 'BSEB' or 'Board'] filed application vide their letter no. Com/FPPCA-141/2011-1827 dated 14.11.2011 for approval of levy of Fuel and Power Purchase Cost Adjustment (FPPCA) charges to the consumers for the period from 01.10.2011 to 31.10.2011 i.e for the month of October, 2011 in terms of the FPPCA formula stipulated in the Tariff Order dated 01.06.2011 for FY 2011-12 of the Commission [hereinafter referred to as 'Tariff Order']. BSEB has sought approval for levy of FPPCA charges @ 55paise/kWh to its consumers except exempted categories to recover a total cost of Rs. 34.535 crores.
2. The petitioner BSEB vide their letter no. Com/FPPCA-141/2011-1935 dated 01.12.2011 revised the petition stating that the additional bills till 31.10.2011 has been received for the UI sale. It has been stated that in the original petition submitted vide Chief Engineer (Commercial) letter no. 1827 dated 14.11.2011 details of UI sale upto 23.10.2011 only has been shown. In the revised petition BSEB has proposed to levy FPPCA charges @ 60 paise per unit on consumption for the month of October, 2011 to recover a total cost of Rs. 36.285 crores.
3. The Board in its filing has stated that due to enhanced cost of power purchase from generating units of NTPC at Farakka, Kahalgaon and Talchar Power Stations, and the other power suppliers and fuel used at Barauni Thermal Power Station the proposal for approval to levy FPPCA charges has been submitted.

4. (a) As per submission of the Board in their letter No. 1935 dated 01.12.2011 source-wise scheduled power purchase (MU) and the total cost incurred during the period 01.10.2011 to 31.10.2011 are detailed in Table below.

Table

| Sl.No. | Source from which power purchased | Total Power Purchase MU | Total Purchase Cost Rs. Crore | Average Rate (4÷3) Paise/kWh |
|--------|---|-------------------------|-------------------------------|------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| 1 | Farakka (T) | 245.689 | 94.156 | 383.232 |
| 2 | Kahalgaon Stage-I (T) | 189.272 | 75.961 | 401.332 |
| 3 | Kahalgaon Stage-II (T) | 30.947 | 14.127 | 456.490 |
| 4 | Talchar (T) | 247.897 | 86.636 | 349.484 |
| 5 | Chukka (HE) | 64.546 | 10.262 | 158.987 |
| 6 | Tala (PTC) | 97.330 | 17.908 | 183.993 |
| 7 | NHPC (Rangeet) | 15.238 | 2.140 | 140.438 |
| 8 | NHPC (Tista) | 57.284 | 8.215 | 143.408 |
| 9 | BHPC | 7.301 | 1.818 | 249.007 |
| 10 | Kanti BUNL | 25.995 | 9.488 | 364.993 |
| 11 | RE Purchase | | | |
| | (a) Co-generation | Nil | Nil | Nil |
| | (b) Solar | Nil | Nil | Nil |
| | (c) Others | Nil | Nil | Nil |
| 12 | Sub Total | 981.499 | 320.711 | 326.756 |
| 13 | UI (Purchase – Sale) | (–) 66.687 | (–) 39.557 | 858.182 |
| 14 | RLDC charges | – | 16.107 | |
| 15 | NVVNL | 115.202 | 47.118 | 409.000 |
| 16 | Grant from State Govt. for 300 MW short Term Power Purchase | | (–) 20.73 | |
| 17 | UI sale for the month of Aug'11 | (–)34.072 | (–)11.295 | |
| 18 | UI sale for the month of Sept'11 | (–)114.128 | (–)19.14 | |
| 19 | Total | 879.029 | 293.214 | 333.565 |

- (b) The various parameters considered for FPPCA calculation as per submission of the Board vide letter no. 1827 dated 14.11.2011 and 1935 dated 01.12.2011 in respect of Barauni Thermal Power Station (BTPS) are as below:

| Gross Gen. (MU) | Aux. Cons. (MU) | Net Gen. (MU) | Coal cons (MT) | Avg. rate of coal Rs./MT | Oil cons. (KL) | Avg. rate of oil Rs./KL |
|-----------------|-----------------|---------------|----------------|--------------------------|----------------|-------------------------|
| 13.60 | 1.36 | 12.24 | 13900 | 2095 | 136 | 45330 |

- (c) The Board vide letter no. 1827 dated 14.11.2011 and 1935 dated 01.12.2011 has submitted that the Energy sold to exempted categories i.e. KJ (Rural), KJ (Urban), IAS-I has been assessed as 28.044 MU for the month of October, 2011 as detailed below in the Table.

Table

| Category | No. of consumer | Connected load in kW | Norms | Energy (in MU) |
|----------|-----------------|----------------------|-------------|----------------|
| KJ (R) | 552667 | NA | 18U/month | 9.948006 |
| KJ (U) | 10900 | NA | 30U/month | 0.327 |
| IAS I | 56099 | 143590 | 1485U/kW/yr | 17.769 |
| Total | | | | 28.04406 |

5. As per the formula for Fuel and Power Purchase Cost Adjustment (FPPCA) specified in the Tariff Order for FY 2011-12, changes in power purchase cost from other sources and fuel cost for its own power station are to be allowed as a pass through. As per the terms and conditions specified in the formula, FPPCA formula is to be applied on monthly basis by BSEB after seeking regulatory approval only when it is five paise and more per unit and the Private Agriculture, Kutir Jyoti and BPL consumers are exempted from levy of FPPCA charges.
6. Having considered the facts and materials submitted by the Board in its filings, the Commission considers the following for estimation of FPPCA charge :
- (a) Power exchange takes place between India and Nepal under bilateral arrangement between the two countries and the tariff rates for such exchange of power is fixed by Indo-Nepal Power Exchange Committee at Govt. of India level. The Commission therefore considers to keep the export / import of power to / from Nepal out of purview of FPPCA.
- (b) The Commission in its tariff order dated 01.06.2011 has approved the power purchase cost from various sources which were taken into consideration for calculation of FPPCA charges as detailed below:

**Power purchase quantity and amount approved by the Commission
excluding Nepal in Tariff Order FY 2011-12**

| S.N | Source | Energy purchase (MU) | Average cost Paise / kWh | Total cost (Rs. crore) |
|-----------|-----------------------------|----------------------|--------------------------|------------------------|
| 1 | Farakka (T) | 2889 | 342 | 988 |
| 2 | Kahalgaon (T) – I | 2155 | 286 | 616 |
| 3 | Kahalgaon (T) – II | 696 | 317 | 221 |
| 4 | Talchar (T) | 2590 | 241 | 624 |
| 5 | Chukka (HE) | 560 | 159 | 89 |
| 6 | Tala (HE) | 1020 | 184 | 188 |
| 7 | Rangeet (HE) | 145 | 186 | 27 |
| 8 | Teesta HE) | 550 | 171 | 94 |
| 9 | BSHPC | 41 | 249 | 10 |
| 10 | KBUNL | 500 | 365 | 183 |
| 11 | RE Purchase | | | |
| | (i) Co-generation | 12 | 412 | 5 |
| | (ii) Solar | 1 | 1500 | 1 |
| | (iii) Others | 131 | 390 | 51 |
| 12 | Transmission & RLDC charges | | | 201 |
| 13 | Total | 11290 | 292.117 | 3298 |

- (c) The Board in its filing has taken Transmission and RLDC charges of Rs. 16.107 crores but the statement of power purchase which has been verified by the CE, Transmission (O&M) submitted by BSEB vide their letter no. 1935 dated 01.12.2011 shows it at Rs. 15.132 crores. Therefore, the Commission considers the amount of Rs. 15.132 crore as Transmission and RLDC charges for working out the FPPCA charges for the month of October, 2011.
- (d) The Board in its filing vide letter their letter no. 1935 dated 01.12.2011 has stated that the Board has sold 66.687 MU power under UI for an amount of Rs. 39.557 crores at an average rate of Rs. 8.58 per unit. However, the statement of UI sale and purchase submitted by BSEB on 23.12.2011 the net sale of energy under UI was shown at 65.879 MU for a total amount of Rs. 39.55 crores the average rate of which comes to Rs. 6.004 per unit. While approving the FPPCA charges for the month of August, 2011 and September, 2011 the Board has sustained the loss for sale of power under UI at a lower rate than the average rate of power purchase and the Commission has not allowed the loss to be transferred to the consumers. Now, the Board has sold the power under UI at higher rate and has earned an additional revenue of Rs. 17.496 crores with respect to average cost of power purchase therefore the Commission has allowed the benefit for sale of power under UI at higher rate to the Board. The Board has deducted the unit sold under UI in the month of August, 2011 and September, 2011 from the total energy including the amount which the Commission does not consider appropriate.
- (e) The Board has purchased 115.202 MU power under short-term from NVVNL for a total amount of Rs. 47.118 crore for which a grant of Rs. 27.73 crore from State Govt. has been shown in the filing of the Board. But during audio-visual presentation of the FPPCA petition before the Commission it was submitted by the Board official that it has been worked on prorata basis and it comes to Rs. 28.38 crores as the Board has purchased 115.202 MU unit against the schedule of 223.20 MU and State Govt. grant of Rs. 55.00 crores. The Commission therefore considers the

State Govt. grant of Rs. 28.38 crores for purchase of power of 115.202 MU under short-term from NVVNL

Considering the above facts, the Commission works out the average power purchase cost per unit as detailed below for the purpose of calculating FPPCA charges for the month of October, 2011

Average Power Purchase Cost per unit during October, 2011

| SI.No. | Source from which power purchased | Total Power Purchase MU | Total Purchase Cost Rs. Crore | Average Rate (4÷3) Paise/kWh |
|--------|---|-------------------------|-------------------------------|------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| 1 | Farakka (T) | 245.689 | 94.156 | 383.232 |
| 2 | Kahalgaon Stage-I (T) | 189.272 | 75.376 | 401.332 |
| 3 | Kahalgaon Stage-II (T) | 30.947 | 14.127 | 456.490 |
| 4 | Talchar (T) | 247.897 | 86.636 | 349.484 |
| 5 | Chukka (HE) | 64.546 | 10.262 | 158.987 |
| 6 | Tala (PTC) | 97.330 | 17.908 | 183.993 |
| 7 | NHPC (Rangeet) | 15.238 | 2.140 | 140.438 |
| 8 | NHPC (Teesta) | 57.284 | 8.215 | 143.408 |
| 9 | BHPC | 7.301 | 1.818 | 249.007 |
| 10 | Kanti BUNL | 25.995 | 9.488 | 364.993 |
| 11 | RE Purchase | | | |
| | (a) Co-generation | Nil | Nil | Nil |
| | (b) Solar | Nil | Nil | Nil |
| | (c) Others | Nil | Nil | Nil |
| 12 | Sub Total | 981.499 | 320.126 | 326.160 |
| 13 | NVVNL | 115.202 | 47.118 | 409.000 |
| 14 | Total | 1096.701 | 367.244 | 334.862 |
| 15 | UI (Purchase – Sale) | (–) 65.879 | (–) 22.061 | 334.872 |
| 16 | RLDC charges | – | (+) 15.132 | |
| 17 | Grant from State Govt. for 300 MW short Term Power Purchase | | (–) 28.38 | |
| 18 | Total | 1030.822 | 331.935 | 322.010 |

- (f) The Commission in its tariff order has considered ex-bus generation and power purchase and so the Commission has considered the ex-bus power generation and purchase.
- (g) The Commission in its tariff order for FY 2011-12 has approved the rate of coal as Rs. 2328/MT and that of oil at Rs. 30,000/KL. The Board has worked out the cost on the basis of norms specified in the Tariff Order for FY 2011-12, and the consumption of coal is slightly higher which Commission allows, accordingly the Commission works out the following parameters as detailed below for the purpose of calculation of FPPCA charges in respect of BTSPS for the month of October, 2011:

| Gross Gen. (MU) | Aux. Cons. (MU) | Net Gen. | Coal cons. (MT) | Oil cons. (KL) | Avg rate of Coal Rs./MT | Avg rate of oil Rs./KL |
|------------------------|------------------------|-----------------|------------------------|-----------------------|--------------------------------|-------------------------------|
| 1360 | 1.36 | 12.24 | 13900 | 136 | 2095 | 45330 |

- (h) As per terms of the FPPCA formula specified in the Tariff Order, Kutir Jyoti, BPL and Private Agriculture consumers are exempted from levy of FPPCA charge. The Board in its petition has assessed the energy sales to the exempted category of consumers at 28.044 MU which has been considered by the Commission for working out the FPPCA charges in the month of October, 2011.
- (i) T&D loss has been taken as 29% for calculation of FPPCA charges as specified in the Tariff Order.
6. In consideration of the facts brought out in the preceding paras, the fuel and power purchase adjustment cost works out to Rs. 30.69 crores on account of changes in power purchase and fuel cost during the period 01.10.2011 to 31.10.2011 with reference to the approved cost. Accordingly, as detailed in annexed calculation sheet, the Commission consider to allow BSEB to recover FPPCA charge provisionally @43paise per unit on the energy consumption of October, 2011 from its consumers except Kutir Jyoti/BPL (Rural and Urban) and Pvt. Agriculture consumers subject to final adjustment on audit of Annual Accounts of the Board for FY 2011-12.
7. In case of metered consumer, FPPCA shall be levied on actual consumption. But in case of unmetered and fixed rate tariff consumers, the Board shall charge FPPCA on the minimum monthly guaranteed consumption as specified for the metered consumers of the same category in the Tariff Order for FY 2011-12.
8. BSEB shall issue public notice notifying the FPPCA rate for the month of October, 2011 in two daily leading newspapers one in Hindi and the other in English and shall place the order on their website. BSEB shall also display the rate of FPPCA in bold letters on the Notice Board of their local billing and collection centre.
9. BSEB shall raise FPPCA bill with details and serve to the consumers separately in the next month indicating the total unit, rate of FPPCA and period for which the FPPCA charges has been levied. BSEB shall keep separate accounts of FPPCA charges billed and realized.

10. The Commission directs that in order to avoid hardship to the consumers due to bunching, in addition to the pending instalments of FPPCA charges for the earlier years, BSEB will pass on the FPPCA charge of only one month of FY 2011-12 at a time.

Sd/-
(S.C. Jha)
Member

Sd/-
(R.N. Sharma)
Member

Sd/-
(U.N. Panjiar)
Chairman