

**BEFORE THE APPELLATE TRIBUNAL FOR ELECTRICITY  
APPELLATE JURISDICTION, NEW DELHI**

Appeal No. 185 of 2005

Dated this 17<sup>th</sup> day of May 2006

Present : **Hon'ble Mr. Justice E Padmanabhan, Judicial Member**  
**Hon'ble Mr. H. L. Bajaj, Technical Member**

DPSC Limited

... Appellant

And

West Bengal Electricity Regulatory Commission

... Respondent

Counsel for the Appellant Dr. Samir Chakraborty, Advotate along with  
Mr. Anjan Chowdhuri, Head (Finance &  
Commerce), DPSC Ltd.

Counsel for the Respondent Mr. Pratik Dhar, Advocate along with  
Mr. C.K. Rai, Advocate with Mr. Anirban Guha,  
Director Engineering, WBERC

**JUDGMENT**

1. This appeal has been preferred by the above named appellant, praying this Appellate Tribunal:-
  - i) to set aside the order dated 27<sup>th</sup> August, 2004 in Case No.FBPCA-2/03-04 and order dated 27<sup>th</sup> October, 2005 passed in Case No.T.P.(R)-14/04-05 in the FPPCA application of the appellant passed by the West Bengal Electricity Regulatory Commission, in so far as the same is against the appellant; and
  - ii) Issue appropriate direction for revising the FPPCA Order and consequently FPPCA recoverable for the year 2002-03 and consequently allow the recovery of the differential amount of Fuel and Power Purchase Cost Adjustment on such re-determination for the year 2005-06 or tariff to be for the year 2006-07, whichever is earlier.

No. of corrections :

2. The appellant, filed its Annual Revenue Requirement Proposal and petition for determination of tariff for the year 2002-03 before the Regulatory Commission. The said Commission issued Tariff Order on 10<sup>th</sup> December, 2002 and followed it with a further order dated 6<sup>th</sup> January, 2003 in the Case TP-2 of 2002-03. The Order dated 6<sup>th</sup> January, 2003 disclosed that the Commission has adopted a formula for Fuel and Power Purchase Cost Adjustment (FPPCA) and the Commission directed the appellant to submit proposal for adjustment and for its approval once in every half year. In other words, the appellant is required to calculate FPPCA as per the formula prescribed by the Regulatory Commission based on approved parameters, costs and consumption. The appellant was required to submit complete details with cost data, quantitative details and the relevant document or information, duly certified.
3. The appellant for the period 2002 to March 2003, filed its certified and audited particulars for determination of FPPCA charge and it was taken on file as Case No.FPPCA-2/03-04. In the said FPPCA petition, the appellant claimed adjustment of 10.24 paise/kWH which was arrived at by the appellant as per the formula. However, the Commission by its Order dated 27<sup>th</sup> August, 2004 determined the FPPCA recoverable as 3.30 paise/kWH. Being aggrieved by the Order dated 27<sup>th</sup> August, 2004 determining FPPCA recoverable as 3.30 paise/kWH, the appellant sought for a review before the Commission. The review petition was taken on file as Case No.TP(R )14-04-05. The review petition was rejected on 27<sup>th</sup> October, 2005 holding that no case has been made out for review as the Commission has adopted the formula correctly. Challenging the Original Order as well as the the Order rejecting the Review Petition, the present appeal has been preferred.
4. Dr. Samir Chakraborty, learned counsel for the appellant, advanced the contention that the Commission misdirected itself in not

considering the normative power purchase quantum as determined by it as “ $E_{imp}$ ” in the denominator in place of actual quantum of power purchased and this has resulted in lowering of the actual cost of fuel and power purchase cost per kWh. Mr. Pratik Dhar, learned counsel appearing for the respondent contended that the formula for the year in question has been rightly applied and no interference is called for with the Order passed by the Commission. The learned counsel for the respondent also brought to our notice that the very formula has since been incorporated in the Regulations framed by the Commission for the subsequent years.

5. The points that arise for consideration in this appeal are:-
  - (i) Whether the formula adopted by the Commission in working the FPPCA is correct?
  - (ii) Whether the Regulatory Commission misdirected itself in arriving at the denominator, i.e., the quantum of sale on which the increased cost was recoverable for energy purchased ( $E_{imp}$ ), the actual power purchase from Damodar Valley Corporation of 579.05 MU has to be adopted instead of normative power purchase of 562.72 MU whose cost has been adopted in the numerator, thus resulting in increase in the Total Energy Requirement in the denominator by 16.33 MU, even though the cost of such energy has been excluded from the numerator resulting in lowering the realization rate allowed in the formula, by adopting an inflated denominator?
  - (iii) To what relief is appellant entitled to?
  
6. As regards the first point, Dr. Samir Chakraborty, clearly stated that the appellant has no controversy with the formula adopted by the Commission and the appellant has no quarrel with the correctness, or otherwise, of the formula. The learned counsel fairly stated that the appellant is making its submission on the premise that the

formula adopted by Commission is correct. Hence, the first point is answered accordingly.

7. Before taking up the second point for consideration, it would be appropriate to extract the very formula itself, FPPCA – formula for Fuel and Power Purchase Cost Adjustment.

FORMULA FOR =

“ FUEL AND POWER PURCHASE COST ADJUSTMENT CHARGE PER UNIT OF ENERGY SOLD DURING ADJUSTMENT PERIOD:

$$\text{FPPCA (p/kwh)} = \frac{(\text{FC} + \text{PPC}) - \text{C}_D - \pm A}{(\text{G}_{\text{own}} + \text{E}_{\text{imp}}) \times (1 - L)} - \frac{\text{fc} + \text{ppc}}{(\text{g}_{\text{own}} + \text{e}_{\text{imp}}) \times (1-L)} \times 100$$

FC (Rs.) Fuel cost of generation as per Normative parameters fixed by the Commission and / or on actual basis (whichever is lower) during the adjustment period.

PPC (Rs.) Total cost incurred including the cost for fuel for power purchase from different sources during the adjustment period.

C<sub>D</sub> (Rs.) Cost disallowed/ disallowable by the Commission as having been incurred in breach of its economic generation/ purchase obligation, or of order/ direction of the Commission, if any, or for any other reason during the adjustment period.

A (Rs.) Adjustment, if any, to be made in the current period to account for any excess/ shortfall in recovery of fuel and power purchase cost in the past adjustment periods.

G<sub>own</sub> (KWH) Total energy sent out from utility’s generating stations during the adjustment period based on normative or actual auxiliary consumption whichever is less.

E<sub>imp</sub>(KWH) Total energy purchase at the sent out bus from different sources during the adjustment period.

L Normative T & D loss fixed by the Commission.

f<sub>c</sub> Fuel cost of own generation as allowed by the Commission in the tariff order corresponding to relevant adjustment period.

ppc Power purchase cost allowed by the Commission for the relevant adjustment period in the tariff order.

g<sub>own</sub> Sent out own generation as admitted in the tariff order by the Commission corresponding to the adjustment period.

e<sub>imp</sub> Power purchase at sent out bus as admitted by the Commission in the tariff order corresponding to the adjustment period.

The proposal for adjustment shall be submitted to the Commission and subject to its approval. Once the proposal is approved, it should be reflected in the consumers' bill in a separate entry for the information. At the end of each adjustment period, which can be half-yearly, the DPSCS shall calculate the FPPCA as per approved formula based on approved parameters, costs and consumption. The complete details along with the cost data, quantitative details and the relevant information/ documents, duly certified for the subject matter revisions and duly audited for the whole year for the March revision, shall be submitted to the Commission for approval.”

8. As already pointed out there is no dispute with respect to the formula to be followed to work out fuel and power purchase cost adjustment charges per unit of energy sold during adjustment period. There is no quarrel with the details furnished by the appellant for the period in question to arrive at the fuel and power purchase cost adjustment charge, even though at the first instance full particulars were not furnished. The Commission computed FPPCA, as seen from its Orders and adopted the figures extracted here under :-

“COMPUTATION OF FPPCA

The Fuel and Power Purchase Cost Adjustment, thus, works out as under:-

FPPCA (Paise/Kwh) =

$$\frac{3736.55 + 16583.58 - 230.85 \pm 0}{(227.08 + 579.05) \times (0.9426)} - \frac{3721.35 + 16585.32}{(241.22 + 583.99) (0.9426)} \quad \times 100$$

$$= \frac{20089.29}{759.86} - \frac{20306.67}{77.84} \quad \times 100$$

$$= (2.6438 - 2.6106) \times 100$$

$$= 3.32 \text{ Paise/kWh}$$

Rounded to 3.30 Paise/kWh”

9. The only dispute is with respect to what should be the  $E_{imp}$  (Element of  $imp$ ). According to the appellant, in the denominator for the figure 579.05 the normative figure of 562.72 has to be applied. The learned

counsel for appellant in this respect contended that in FPPCA Order for 2002-03, the Commission had accepted the accelerated rate of power purchase actually incurred as 286.39 paise/kWh (Power Purchase Cost). If the average power purchase cost (kWh) is to be computed on the basis of the Commission's FPPCA Order, the average cost per kWh allowed to be recoverable will work out to 278.32 paise/kWh. This will result in the under recovery of the power purchase cost by 8.07 paise/kWh (286.39 - 278.32 = 8.07 paise/kWh). According to the learned counsel, the wrong denominator adopted by the Commission would lead to under recovery and admitted incremental cost. The learned counsel further pointed out that the denominator on application of the figures, as applied by the Commission and as advanced by the appellant is different and the difference in figures are as set out here under:-

“ (a) Denominator Formula:  $(G_{own} + E_{imp}) \times (I - L)$

As per Hon'ble Commission's Order:

$$(227.08 + 579.05) \times (1 - 0.0574) = 759.86$$

As per Appellant :  $(227.08 + \underline{562.72}) \times (1 - 0.0574) = 744.46^*$

\* Includes normative own consumption of 3.55 MU (Page 120 of the Appeal petition) on which FPPCA is not recoverable.

Actual sales, as admitted by Commission = 741.12 MU (Page 120 of the Appeal petition)

(b) Based on the above, the actual fuel and power purchase cost per kWh allowable in the first part of the formula has been determined by the Regulatory Commission as:

$$= \frac{(3736.55 + 16583.58) - 239.84}{(227.08 + 579.05) \times 0.9426}$$

$$= \frac{20089.29}{806.13 \times 0.9426}$$

$$= \frac{20089.29}{759.86} = \text{Rs.2.6438/kWh}$$

(c) As per the Appellant, the actual fuel and power purchase cost per kWh should have been determined as Rs.2.6985/kWh as calculated below:

$$\begin{aligned}
 &= \frac{(3736.55 + 16583.58) - 230.84}{(227.08 + \underline{562.72}) \times 0.9426} \\
 &= \frac{20089.29}{789.80 \times 0.9426} \\
 &= \frac{20089.29}{744.46} = \text{Rs.2.6985/kWh}
 \end{aligned}$$

10. Per contra, the learned counsel appearing for the respondent submitted that absolutely there are no merits and the denominator in respect of which the appellant has expressed its grievance is neither incorrect nor erroneous and the figures have been rightly adopted in the calculation. It is further commented on behalf of Respondent that the entire claim of the appellant is erroneous and it is devoid of rationality. It is further pointed out that if such actual purchase cost was divided by reduced quantum of purchase ( $E_{imp}$ ), taking the same in denominator, as sought for by the appellant, the unit cost of purchase would have been inflated and it is logical to divide the actual cost of purchase by the actual quantum of purchase for arriving at the unit rate of purchase. It is also pointed out that the amount of cost that was deducted in the numerator, in fact was, on account of excess auxiliary consumption as well as “T” and “D” Losses in excess of the norms Prescribed by the Commission.
11. Here and now, we would like to point out that such an approach by the Commission is not acceptable nor it could be termed as the fair and reasonable one. In the formula, the factor  $E_{imp}$  (kWh) has been described as – The Total Energy Purchased at the sent out bus from different sources during the adjustment period. The expression PPC,

according to the formula is the Total Cost Incurred including the cost for Fuel for Power Purchase from different sources.

12. Looking at from a different angle, it is a fact that the actual power purchase and fuel cost, as allowed in Tariff Order, has been arrived at Rs.2.6106/kWh after application of normative operating parameters. Even according to the Commission, actual sales of the appellant has been 741.12 MU. The amount realized from the consumers on account of fuel and power purchase cost throughout the tariff period works out to Rs.19,347.68 lacs (741.12 x 10 x 2.6106). The admissible cost of power purchase and fuel during the year has been determined by the Commission at Rs.20,089.29 lacs. That being the position, the consequential incremental cost recoverable through the FPPCA mechanism comes to Rs.741.61 lacs (20,089.29 – 19,347.68). As per the formula applied and adopted by the Commission, the recovery that will take place on sales of 741.12 MU is Rs.244.57 lacs only, resulting in a shortfall in recovery of Rs.497.04 lacs (741.61 – 244.57). It is also pointed out that multiplying the actual admitted sales and the amount permitted to be recovered would be more or less equal to the incremental cost incurred, viz., Rs.741.61 lacs. As against the figures adopted by the Commission, the appellant tried to persuade us to adopt the figures in respect of various figures as here under:-

$$\begin{aligned}
 \text{"FPPCA (p/kWh)} &= \frac{(3736.55 + 16583.58) - 230.84}{(227.08 + \underline{562.72} - 3.55) \times 0.9426} \\
 &= \frac{20089.29}{786.25 \times 0.9426} \\
 &= \frac{20089.29}{741.12} = \text{Rs.2.7107/kWh}
 \end{aligned}$$



13. In the denominator for the figure 579.05, the appellant sought for substitution of the said figure with the figures 562.72 – 3.55, which is the only parameters in the denominator which requires a change according to the appellant.
  
14. Looking at from any angle, we find there is force in the submission and the contention advanced by the learned counsel for the appellant in this appeal warranting interference. Concedingly, the actual purchase cost incurred by the appellant during the relevant period is 579.05 MU purchased at 286.39 paise/kWh amounting to Rs. 16,583.58 lacs. The Commission has taken the normative value of such power purchased at 562.72 MU. It is pointed out by the appellant for making good the energy loss above the normative level in respect of Auxiliary consumption, own consumption and T & D losses, when actuals are available and the formula is silent as to whether the actual figure has to be adopted/ applied or normative figure has to be applied in working out FPPCA, the position which is more favourable to the appellant, as a result of the challenge raised by the appellant has to be answered in favour of the appellant, as there is no justification to deny actual cost. Had the Commission had appended a note with respect to formula, that only normative cost will be taken, things would have been different. That is not the case, and there is no justification to deny the actual cost incurred for purchase of power lest the appellant will be prejudiced. However, a discerning look at the formula reveals that the entire objective of the formula is to work out the fuel and power purchase cost adjustment during the adjustment period in a rational manner. Attempt is to determine the cost at the end of the adjustment period as also at the beginning of the adjustment period. This is exactly what is sought to be arrived at by adopting the formula in the first part and the second part respectively. It is also to be appreciated that, both in the first and the second parts, the numerators are giving the total cost of fuel and power and the denominators give the total power – of course giving due consideration for the amounts not allowed, the past adjustment

as also the losses. It is only for the year in question we would be justified in giving directions to render substantial Justice. This shall not enable the appellant to claim identical benefit for the subsequent year/s.

15. Analysing the numerator of part one of the formula, we note that PPC represents the total cost incurred including the cost for fuel/ for power purchased from different sources during the adjustment period. In this particular case, Rs.16583.58 represents the cost of Rs.579.05 MUs.  $C_D$  represents the cost disallowed/ disallowable by the Commission as having been incurred in breach of its economic generation/ purchase obligation, or of order/ directions of the Commission, if any, or for other reason during the adjustment period. Again in this particular case, the Commission has not allowed cost of excess purchase of 16.33 MU @ Rs.2.8639 (equal to Rs.467.67 lakhs). The Commission has made adjustment for the cost of unaccounted energy deducted from the total amount of revenue requirement while ascertaining net revenue to be realized from the consumers to the extent of Rs.236.83 lakhs, being the cost of 9.09 MUs. (Refer Para 12.3 of the Commission's Order dated 10.12.02). Therefore, the numerator of Part One of the formula should reflect the power purchase cost of  $579.05 - 16.33 + 9.09 = 571.81$  MUs.
16. For determining the cost per unit one has to simply divide the total cost of 'x'-units of energy in the numerator by the number of same 'x'-units in the denominator. It would, therefore, be only appropriate to adopt  $E_{imp}$  as the same number of units that have been taken in the numerator for determining the total cost of power purchase, i.e., 571.81 MUs.

17. It may be pertinent to note that in the second part of the formula the Commission itself has taken the total power purchase cost (ppc) for 583.99 MUs. The same MUs, i.e., 583.99 MUs have been taken as the power purchase at sent out bus ( $e_{imp}$ ). Hence we direct the formula, by following the actual figures and which are to be applied in working out FPPCA adjustment for the said year in Question. The correct working of the formula is as set out here under and the appellant shall have the benefit of the same:-

$$\begin{aligned}
 & \text{FPPCA in Paise/unit} = \\
 & \left( \frac{3736.55 + 16583.58 - 230.84}{(227.08 + 571.81) \times 0.9426} - \frac{3721.35 + 16585.32}{(241.22 + 583.99) \times 0.9426} \right) \times 100 \\
 & = \left( \frac{20089.29}{753.34} - \frac{20306.67}{777.843} \right) \times 100 \\
 & = \left[ (2.6678 - 2.6106) \times 100 \right] \\
 & = 5.72 \text{ Paise/unit rounded off to 5.7 Paise/unit}
 \end{aligned}$$

18. Before conclusion, it is also to be mentioned that learned counsel appearing for the respondent raised a preliminary objection as to maintainably and during the hearing we have expressed that the preliminary objection is devoid of merits. Concedingly the Tariff Order was passed on 27<sup>th</sup> August 2004 and FPPCA Order was passed on 27.08.2004. Review petition which was entertained was rejected on 27.10.2005. The Electricity Act, 2003 was notified and Sections 1 to 120 of the Act are enforceable, w.e.f., 10.06.2003. the Electricity Regulatory Commission's Act 1998 has been repealed by Section 185 of The Electricity Act, 2003. Thus, viewed from any angle the preliminary objection raised by the counsel for the respondent cannot be sustained and the present appeal is competent and maintainable under Section 111 of The Electricity Act, 2003.

19. The appeal is allowed in Part and in terms of Para 17 above and all the three points are answered accordingly in favour of the appellant. This order will govern only the year in Question and it shall not be a binding precedent.

Pronounced in open Court on this 17<sup>th</sup> day of May 2006.

**(Mr. H. L. Bajaj)**  
**Technical Member**

**(Mr. Justice E Padmanabhan)**  
**Judicial Member**