

**Appellate Tribunal for Electricity
(Appellate Jurisdiction)**

Appeal No. 260 of 2012

Dated: 7th August, 2014

**Present: Hon'ble Mr. Rakesh Nath, Technical Member
Hon'ble Mr. Justice Surendra Kumar, Judicial Member**

In the matter of:

M/s. A.B. Grain Spirits Pvt. Ltd.,

Village Kiri Afgana,
Tehsil Batala, Distt. Gurdaspur,
(Punjab) 143 527

... Appellant (s)

Versus

**1. Punjab State Electricity Regulatory Commission,
SCO No. 220-221, Sector-34-A,
Chandigarh- 160034**

**2. Punjab State Power Corporation Limited,
The Mall, Patiala (Punjab), Pin 147 001**

**3. Punjab Energy Development Agency,
Solar Passive Complex, Plot No. 1-2,
Sector-33D, Chandigarh,
Pin-160 033**

...Respondent(s)

Counsel for the Appellant(s) : Mr. Rajesh Mittra
Mr. Arjun Malik
Mr. Robin Majumdar

Counsel for the Respondent(s) : Mr. Sanjay Sen, Sr. Adv.
Ms. Shikha Ohri,
Ms. Anushree Bernard
Ms. Ruth Elwin for R-1

Mr. Anand K. Ganesan
Ms. Swapna Seshadri for R-2

JUDGMENT

RAKESH NATH, TECHNICAL MEMBER

This Appeal has been filed by M/s. A.B. Grain Spirits Private Limited against the order dated 19.9.2012 passed by Punjab State Electricity Regulatory Commission (“State Commission”) determining tariff payable to the Appellant’s co-generation Project by the Distribution Licensee.

2. The State Commission is the first Respondent. Punjab State Power Corporation Ltd. (“PSPCL”), the Distribution licensee, is the second Respondent.

3. The facts of the case are as under:

- (i) The Appellant had set up a distillery unit along with a 5.5 MW Co-generation Power Plant in the border district of the State of Punjab during the year 2007-08. The Power

Plant was commissioned on 8.8.2008. Since then, the surplus power of the Appellant has been sold to the Electricity Board at the rates prescribed by Government of Punjab - New & Renewable Sources Energy Policy 2006, subsequently modified/adopted by the State Commission vide its order dated 13.12.2007.

- (ii) The State Commission by order dated 13.12.2007 decided that the rates as prescribed by Government of Punjab policy of 24.11.2006 will be applicable for a period of five years i.e. upto 2011-12, after which the last escalated tariff shall continue and the State Commission will determine the manner in which further enhancement in tariff, if any, by way of encouragement to the sector is to be effected.

- (iii) PSPCL, the second Respondent and the Appellant renewed the agreement w.e.f. 1.4.2011 incorporating a rate of Rs. 4.04 per kWh without any provision for any further enhancement for further 17 years.
- (iv) Thereafter, the Appellant on 20.6.2011 filed a Petition u/s 86 read with Section 94 (f) of the Electricity Act, 2003 for revision of tariff rates fixed by the State Commission vide order dated 13.12.2007 after the year 2011-12 in respect of its Bio-mass Co-generation Power Plant with aggregate capacity of 5.5 MW.
- (v) The said Petition was disposed of by the State Commission vide the impugned order dated

19.9.2012 determining a tariff of Rs. 5.02 per kWh as against the tariff of Rs. 8.30 per kWh claimed by the Appellant. The tariff was made applicable w.e. from the date of the order i.e. 19.9.2012 as against 1.4.2012 claimed by the Appellant.

(vi) Aggrieved by the impugned order dated 19.9.2012 of the State Commission, the Appellant has filed this Appeal.

4. The Appellant is aggrieved by the following:

- (i) Adoption of Project cost
- (ii) Fixing of fuel price
- (iii) Weightage in respect of auxiliary consumption.
- (iv) Applicability of tariff from the date of order.

5. On the above issues the Appellant has made the following submissions:

(A) Adoption of Project cost:

The Appellant had set up a distillery unit along with the 5.5 MW Turbo Generator set during the year 2007-08 after the project of the Appellant was considered and approved by the Punjab Energy Development Agency, the Respondent no. 3 herein and the nodal agency of the State Government for development of renewable energy projects. The Respondent no. 3 had approved the project cost of the Appellant's 5.5 MW project at Rs. 33.41 crores. However, the State Commission has determined the project cost only at Rs. 3.75 crores per MW (about 20 crores).

(B) Fixing of Fuel Price:

The methodology adopted by the State Commission is against the Central Commission's Regulation 40 which stipulates that biomass plants would use the non fossil fuels available in the vicinity. Accordingly, the price mix of only those fuels should have been considered which are available in the vicinity of the Project. The State Commission has, however, considered mix of fuels like bagasse, cotton waste and agriculture waste like rice straw to arrive at a rate of Rs. 2357 per MT. The area where the Project is located, no cotton waste or bagasse is available. Rice straw is also not available in sufficient quantity and even if available, cannot be used in the boiler of the Appellant's plant. Thus, the State Commission has erred in adopting the fuel rate for mix of bagasse (Rs. 1591 per MT) and biomass (Rs. 2756 per MT) at

Rs. 2357 per MT as against Rs. 4000 per MT claimed by the Appellant.

(C) Weightage in respect of auxiliary consumption:

The State Commission has erred in not considering loading of 10% on account of auxiliary consumption while computing the tariff.

(D) Applicability of tariff from the date of order:

The State Commission has erred by making the tariff effective from the date of the order i.e. 19.9.2012 instead of 1.4.2012 even though the application was filed 9 months ahead of the month of April, 2012.

6. The impugned order is supported by PSPCL, the Respondent no. 2, stating that the tariff has been determined by the State Commission in accordance

with the relevant provisions of Renewable Energy Regulations 2012 for non-fossil fuel based co-generation projects including norms of auxiliary consumption, capital cost, etc. The Appellant has brought forth no supporting documents to justify the increase claimed for and is mainly reiterating the claim without any rational basis. The State Commission has come to specific finding that the Appellant did not provide any supporting documents to substantiate its claims.

7. We have heard Mr. Rajesh Mittra, learned counsel for the Appellant, Mr. Sanjay Sen, learned Sr. Advocate and Ms. Shikha Ohri on behalf of the State Commission and Mr. Anand K. Ganesan and Ms. Swapna Seshadri, learned counsel for the Respondent no. 2.

8. After careful examination of the contentions of the parties, the following questions would arise for our consideration:

- (i) Whether the State Commission has erred in determining the capital cost of the Appellant's power plant?
- (ii) Whether the State Commission has erred in determining the fuel price by considering a mix of fuels without considering the availability of fuels in the vicinity of the Power Plant?
- (iii) Whether the State Commission was correct in determining the auxiliary consumption at 9.49% and applying the auxiliary consumption on the variable price component

only instead of both on fixed and variable tariff components?

- (iv) Whether the State Commission was correct to apply the tariff from the date of the impugned order i.e. 19.9.2012 instead of from beginning of the FY 2012-13 i.e. 1.4.2012?

9. Let us examine the first issue regarding determination of capital cost.

10. According to the Appellant the capital cost should have been adopted at Rs. 33.41 crores as approved by Punjab Energy Development Agency, the nodal agency of Renewable Energy development in the State of Punjab.

11. According to Mr. Anand K. Ganesan, learned counsel for the Respondent no. 2, the State Commission has determined the fixed charges as per

its Renewable Energy Regulations 2012. The Appellant had already agreed for a tariff of Rs. 4.04 per unit including fixed and variable charges while renewing the PPA and entered into a long term PPA with the Respondent no. 2 w.e.f. 1.4.2011. However, the State Commission has already allowed a tariff higher than what was agreed in the long term PPA entered into between the Appellant and the Respondent no. 2. The Appellant also failed to produce the relevant details to establish their claim.

12. Let us examine the relevant findings of the State Commission in the impugned order.

13. The State Commission has held that as per its Renewable Energy Tariff Regulations, 2012, the Appellant's plant would be treated as non-fossil fuel based co-generation project and accordingly the State

Commission decided to determine the tariff as per the 2012 Tariff Regulations as applicable to non-fossil fuel based co-generation projects. The State Commission has noted that the PPA provides the rate for sale of power as Rs. 3.49 per kWh (base year 2006-07) with 3% escalation on yearly basis upto FY 2011-12 after which the last escalated tariff shall continue and the State Commission will determine the manner in which further enhancement of tariff, if any, by way of encouragement to the sector is to be affected. According to PPA, the tariff for FY 2011-12 is Rs. 4.04 per kWh.

14. The findings of the State Commission are as under:

“The Commission notes that the very fact that the petitioner opted to sign the PPA on 25.4.2011 upto 7.4.2028 i.e. for a period of nearly 17 years and at the rate mentioned above, in the last year of the

tenure of the NRSE Policy, 2006, indicates thereby that the said tariff is viable. However, considering the principles of natural justice, equity and good conscious and the provisions in the Tariff Policy and National Electricity Policy, encouraging generation from renewable energy sources and the mandate for promotional tariff to be given for such projects, the Commission decides to work out the tariff for the petitioner's project afresh, as done in case of petitions filed by other eligible renewable energy generating companies, wherein the Commission had concluded that tariffs as provided in the NRSE Policy 2006 are currently unrealistic and would prove unviable for NRSE units located in the State."

"25. As brought out in the foregoing paras, the tariff for petitioner's project is mandated to be determined as per the relevant provisions of RE Regulations 2012 for non-fossil fuel based co-generation projects. The Commission has already determined the generic tariff for various RE technologies for the year 2012-13 in its Order

dated 19.7.2012 in accordance with the RE Regulations 2012.

26. For working out the levellised fixed cost of the petitioner's project for the year of applicability of tariff i.e. FY 2012-13, the Commission intends to determine the capital cost of petitioner's co-generation project commissioned in 2008-09 for that year by applying the capital cost indexation mechanism as specified in the RE Regulations, 2012, on the normative capital cost of Rs.420 lac per MW for non-fossil fuel based co-generation projects for the year 2012-13 and then depreciate it to the applicable year of tariff i.e. 2012-13. Accordingly, the normative capital cost for the year 2008-09 comes to Rs.374.96 lac per MW which, after depreciation at the standard book depreciation rate of 5.28% per annum upto 2012-13, works out to Rs.301.82 lac per MW for the year 2012-13. With this capital cost and using normative parameters for FY 2012-13, the levellised fixed cost works out to Rs.1.60 per kWh."

Thus, the State Commission determined the capital cost of the Appellant's Project which was commissioned during FY 2008-09 by applying capital cost indexation as specified in the RE Regulations 2012 on the normative capital cost of Rs. 420 lakhs per MW for non-fossil fuel based cogeneration project for FY 2012-13 and accordingly worked out capital cost as Rs. 374.96 lakhs per MW for FY 2008-09. The State Commission then applied depreciation rate of 5.28% per annum upto 2012-13 to work out the normative capital cost of Rs. 301.82 lakhs per MW for FY 2012-13.

15. We find that Appellant Company in their petition before the State Commission had not given any supporting documents about the capital cost claimed by them except that for their 5.5 MW TG Project the capital cost is Rs. 33.41 crores i.e. about 6 crores per

MW. The Appellant's project was commissioned on 8.4.2008. The capital cost for a non fossil fuel based co-generation project commissioned during 2012-13 as per the Renewable Energy Regulations of the State Commission is 4.2 crores per MW. Thus, the capital cost claimed by the Appellant for its co-generation project which was commissioned 4 years before FY 2012-13 is higher than the normative capital cost for the new Project commissioned in 2012-13 as per the Tariff Regulations. Therefore, the claim of the Appellant for capital cost is abnormally high. We feel that the State Commission has correctly determined the capital cost of the project as in 2008-09 by applying indexation factor on the capital cost as specified in the Tariff Regulations at 2012-13 base.

16. We do not agree with the Appellant that the estimated cost approved by the Punjab Energy

Development Authority (PEDA) should be adopted by the State Commission. The State Commission is the competent authority to determine the tariff of the Appellant's project under Section 62 and 86 (1)(b) of the Electricity Act, 2003 read with Section 61. The State Commission has to determine the tariff as per its Tariff Regulations. The State Commission is not bound to adopt the capital cost approved by PEDA or any such agency. This issue was also not raised by the Appellant before the State Commission and is being raised for the first time at appellate stage which is not permissible.

17. In view of above, we do not find any reason to interfere with the order of the State Commission.

18. The second issue is regarding fuel price.

19. According to the Appellant the State Commission should have considered the price mix of only those fuels which are available in the vicinity of the project and

should have approved the price of Rs. 4000 per MT as claimed by the Appellant for use of paddy husk as fuel.

20. According to the Respondent no. 2, the Appellant had misrepresented the facts that only paddy husk was used as fuel. In fact biogas which is generated from the distillery effluent is partly used for generation of electricity and if the biogas is not used for generation of electricity, it will go waste.

21. Let us now examine the relevant portion of the impugned order dealing with fuel cost.

“28. Recently, the Commission, vide its Order dated 19.7.2012 has adopted Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations 2012 for the control period 2012-13 to 2016-17 with State specific modifications in respect of the number of operating days on bagasse and biomass fuel mix for non-

fossil fuel based co-generation projects. The Commission, after analysing the data received from the Cane Commissioner, Punjab with respect to the number of operating days of the cooperative as well as private sugar mills in the State and considering the comments/suggestions/objections received in response to the public notice, rationalised the number of operating days for operation of non-fossil fuel based co-generation projects on bagasse to 100 days and the remaining period during the year on biomass fuel mix for operation of such plants at a PLF of 80%. A normative escalation of 5% has been allowed on the bagasse price of Rs.1515 per MT and biomass fuel mix price of Rs. 2625 per MT for FY 2011-12 i.e. Rs. 1591 per MT and Rs. 2756 per MT respectively and accordingly the weighted average price of the fuel comprising bagasse and biomass fuel mix worked out to Rs.2357 per MT for FY 2012-13 and adopted by the Commission for calculating the variable component of the composite/singular tariff for non-fossil fuel based co-generation projects irrespective of the fuel to be

used by the developers. The Commission has allowed the same fuel cost for such projects in the generic tariff as well. Interestingly, the criterion adopted by CERC for fixing the biomass fuel mix price is the median value of the three costs i.e. equivalent heat value approach for landed cost of coal for thermal stations at respective States, SERCs specified norms for FY 2011-12 escalated with 5% and MNRE recommended prices. In case of Punjab, the median value came out to be the SERC specified price for FY 2011-12 i.e. Rs.2625 per MT escalated at 5% working out to Rs.2756 per MT, which has been fixed by CERC in its Order dated 27.3.2012 as also adopted by the Commission.

29. The Commission notes that the petitioner has submitted that it is using only rice husk as the fuel. The Commission also notes that Regulation 53 (2) of RE Regulations, 2012 provides that for use of biomass other than bagasse in non-fossil fuel based co-generation projects, the biomass prices as specified under Regulation 44 shall be applicable. The Regulation 44 pertains to fuel cost for biomass

based projects. Since the Commission has already specified a composite/singular tariff irrespective of fuel to be used for non-fossil fuel based co-generation projects in the State as brought out in the foregoing paras, the Commission does not find any applicability of Regulation 53 (2) for such projects to be set up in the State. Moreover, the Commission notes that PEDDA in its reply dated 3.9.2012 filed in compliance to the Order of the Commission dated 30.8.2012, submitted that the petitioner's project is using a multi-fuel boiler suitable for using rice husk, biogas and bagasse. In reply to the query of the Commission to confirm whether 20% biogas as per DPR is being used as a fuel or not, PEDDA submitted that as per information gathered after visiting the plant, it has been found that biogas digesters are installed and 10% biogas is being used alongwith 90% rice husk, which is generated from the distillery effluent and if not used in the plant itself, will go waste. The flow meters for biogas measurement were found not working during the site visit by PEDDA and the said information regarding percentage of biogas being

used is as per the information given by the petitioner's representative. The Commission notes with concern that in its submission dated 27.9.2011, the petitioner informed the Commission that the biogas generated in the distillery is hardly sufficient to meet the needs of the distillery unit and generation is totally dependent upon biomass fuel. However, on the asking of the Commission for a report in this regard by PEDDA, the petitioner in its submissions dated 3.9.2012 has admitted small usage of biogas not impacting the fuel cost much. On the contrary, the Commission opines that even 10% use of biogas is significant considering that the GCV of biogas is considerably (almost 70-80%) higher than that of rice husk. Summarizing, there is no merit in the claim of the petitioner that its generation is totally dependent upon rice husk.

PEDA further stated in the hearing of the Commission held on 4.9.2012 that in the DPR of the petitioner, fuel combinations comprising rice husk & bagasse and rice husk & biogas were provided and further stated that the boiler in the

petitioner's plant, with design modifications, can use rice straw also which is available in the area. With regard to the contention of the petitioner that it is difficult to use rice straw as fuel due to inherent problems, the Commission observes that it has recently determined the Tariff for a renewable energy power plant setup in the State having a long term PPA with PSPCL operating mainly with rice straw as fuel. The Commission opines that the developers need to design their generating plants including boilers after a detailed study of the cheaper fuels available in the area of the proposed projects so as to optimize the fuel mix and minimize their cost of generation. This is necessary to keep the cost of power purchase by PSPCL minimal in the interest of the consumers of the State. As per PEDDA's submissions, a significant quantum of rice straw is available in the area where the petitioner's project has been setup. It should have been the endeavour of the petitioner for keeping this fact in view while designing its boiler. The petitioner should conduct necessary design

modifications in its boiler to enable the use of rice straw as a fuel.”

22. We find that the State Commission has given a detailed order for determining the fuel cost. The State Commission vide its order dated 19.7.2012 has adopted Central Commission's Regulation 2012 for the Control Period 2012-13 to 2016-17 with State Specific modifications. The State Commission has allowed a normative escalation of 5% on the fuel price of bagasse and biomass fuel mix price determined for FY 2011-12 earlier to work out the price at 2012-13 base and accordingly determined the weighted average price of fuel comprising bagasse and biomass fuel mix at Rs. 2357 per MT.

23. We also note with concern the conduct of the Appellant in misrepresenting about use of biogas from their distillery for power generation. The Appellant in

its petition had shown that risk husk is being used. However, when the representative of PEDDA, the State nodal renewable energy development agency, was deputed at the Appellant's Project, it was found that the biogas produced from the distillery effluent from the distillery plant of the Appellant was also being used. The plant also had biogas digesters for production of biogas. The flow meter for measurement of quantum of biogas used in the power plant was found out of order by PEDDA representatives who visited the plant. However, it was informed by the Appellant that 10% biogas is being used for power generation. In the Petition filed by the Appellant it was not indicated that biogas from their distillery waste is also being used for power generation.

24. The Appellant claimed variable cost of Rs. 5.07 per kWh for 2012-13, whereas from 2006-07

to 2011-12, the Appellant was supplying electricity at total tariff (fixed plus variable cost) at Rs. 3.49 per kWh enhanced annually @ 3% and the total tariff for FY 2011-12 was Rs. 4.04 per kWh. The Appellant has also not given any supporting documents before the State Commission regarding fuel cost and even the use of biogas produced from its distillery effluent was also not reliable as the flow meter for measurement of quantity of gas at the Appellant's plant was not working.

25. In view of above, we feel that the State Commission has correctly allowed the fuel price based on the fuel mix as allowed to all such projects in the generic tariff.

26. The third issue is regarding auxiliary consumption.

27. According to the Appellant, auxiliary consumption of 10% should have been adopted instead of 9.49% and should have been applied to both fixed and variable charges instead of only variable charges.

28. We find that the State Commission has not given any finding on the auxiliary consumption and has also not given any indication whether the tariff rate worked out for fixed and variable cost takes into account the normative auxiliary consumption.

29. The State Commission and the Respondent no. 2 have also not given any reply on this issue.

30. The Appellant has furnished a copy of the information obtained by the Appellant under the RTI which indicates that auxiliary consumption of 9.49% has been used in computing the net variable cost.

31. We, therefore, remand this matter to the State Commission to consider the contentions of the Appellant and pass consequential order as per its Regulations. Accordingly directed.

32. The fourth issue is regarding effective date of application of tariff determined by the State Commission.

33. According to the Appellant, the tariff should have been made effective from 1.4.2012.

34. Let us examine the findings in the impugned order in this regard.

“31. The Commission is of the view that the aforementioned tariff is just and reasonable and will be payable to the petitioner prospectively with effect from the date of this Order. The Commission notes that in its Order dated 13.12.2007 it was held that “.....rates as prescribed in the Policy will

be applicable for a period of 5 years (upto 2011-12) after which the last escalated tariff shall continue and the Commission will determine the manner in which further enhancement in tariff, if any, by way of encouragement to the sector is to be effected....”.

The Commission further notes that clause 2.1.1 of the PPA, which is a valid and subsisting PPA as on date, also contains the same provision. Accordingly, the Commission decides that upto the date of this Order, the last escalated rate shall continue to be payable. The Commission has not allowed revision/re-determination of tariff with retrospective effect in any of the earlier similar petitions. The levellised fixed component will remain the same during the tariff period. However, the variable component will change each year based on whether the petitioner opts for fuel price indexation or normative escalation factor of 5% as per RE Regulations 2012.

35. Thus, the State Commission allowed the tariff from the date of the impugned order on the basis of its

order dated 31.12.2007 and clause 2.1.1 of the PPA dated 25.4.2011 entered into between the parties.

36. Let us examine the clause 2.1.1 of the Power Purchase Agreement.

“2.1.1 The PSPCL shall purchase and accept all energy made available at the interconnection point from the Generating Company’s facility, pursuant to the terms and conditions of this Agreement at the rate approved by the Commission, which is set out below:

Rs. 3.49 per Unit (base year 2006-07) with 3% annual escalation on yearly basis upto 2011-12. The Commission holds that rates as prescribed in the Policy will be applicable for a period of 5 years (upto 2011-12) after which the last escalated tariff shall continue and the commission will determine the manner in which further enhancement in tariff, if any, by way of encouragement to the sector is to be effected.

The escalated tariff will be applicable from 1st day of April of each year. The rate would be uniform throughout the day for the entire year. No additional payment shall, on any account be payable by the PSPCL. This power shall be scheduled by PSPCL on first charge basis”.

Thus, the PPA provides for continuation of tariff for FY 2011-12 till the Commission determines the enhancement of tariff, if any, to encourage the sector.

37. The Appellant lays emphasis on the provision of clause 2.1.1 that the escalated tariff will be applicable from 1st day of April of each year.

38. We find that the Appellant had filed petition for determination of tariff on 20.6.2011. As per Section 64 of the Electricity Act, 2003, the State Commission should have determined the tariff within 180 days. However, the impugned order for determination of

tariff was issued on 19.9.2012 i.e. after about 15 months. We feel that the tariff should have been made effective from 1.4.2012 as the Appellant had taken timely action by filing the Petition for determination of tariff about 9 months before the commencement of the FY 2012-13. Accordingly, decided.

39. Summary of our findings:

i) Capital cost: We do not find any infirmity in the findings of the State Commission.

ii) Fuel Cost: We do not find any fault in the findings of the State Commission.

iii) Auxiliary consumption: We have remanded the matter to the State Commission with some directions.

iv) Date of application of the tariff: The tariff should be made applicable from 1.4.2012.

40. In view of above, the Appeal is allowed in part as indicated above. The State Commission is directed to pass consequential order at the earliest. No order as to cost.

41. Pronounced in the open court on this

7th day of August, 2014.

**(Justice Surendra Kumar)
Judicial Member**

**(Rakesh Nath)
Technical Member**

√
REPORTABLE / ~~NON-REPORTABLE~~
Vs