BEFORE THE KARNATAKA ELECTRICITY REGULATORY COMMISSION
No. 16 C-1, Miller Tank Bed Area, Vasanth Nagar, Bengaluru-560 052

Dated : 28th June, 2018

Present:

Shri M.K. Shankaralinge Gowda .. Chairman
Shri H.D. Arun Kumar .. Member
Shri D.B. Manival Raju .. Member

OP No. 137/2017

BETWEEN :

Haveri Bio Energy Pvt. Ltd.,
H-984, 985, Palam Extension,
Ramphal Chowk, Sector 7, Dwarka,
NEW DELHI – 110 075 .. PETITIONER

[Represented by Link Legal India Law Services, Advocates]

AND:

1) Bangalore Electricity Supply Company Limited,
K.R. Circle,
Bengaluru – 560 001.

2) Karnataka Renewable Energy Department Limited,
No.39, “Shanthi Gruha”, Bharath Scouts and Guides Building,
Palace Road,
Bengaluru-560001. .. RESPONDENTS

[Respondent 1 represented by M/s. Justlaw, Advocates]
ORDERS

1) This Petition is filed under Sections 61, 62 and 64 read with Section 86(1)(a) of the Electricity Act, 2003, Regulation 9(1) of the KERC (Power Procurement from Renewable Sources by Distribution Licensees and Renewable Energy Certificate Framework) Regulations, 2011 and Regulation 11 of the KERC (General and Conduct of Proceedings) Regulations, 2000 praying for the following reliefs:

“(i) Provide a two-part tariff for biomass power projects using air-cooled condensers, pursuant to the Tariff Order dated 10.07.2014 and in the manner as determined for biomass projects, using water cooled condensers, through Orders dated 01.01.2015 and 22.01.2015;

(ii) With respect to the two-part tariff, determine the variable component of the two-part tariff based on heat rate, auxiliary consumption, specific fuel consumption, fuel costs and escalation of fuel costs for biomass projects using air-cooled condensers; and

(ii) Pass such other Orders as the Commission deems fit and proper as per the facts and circumstances of the case.”
2) The material facts of the case as stated by the Petitioner in the Petition may be summed up as follows:

(b) The Petitioner owns and operates a 10 MW Biomass power plant with air-cooled condensers at Haveri Taluk, Karnataka and entered into a PPA on 17.10.2014 with Bangalore Electric Supply Company Limited (BESCOM) and the project was commissioned in July, 2014. The Petitioner had earlier filed a petition, numbered as OP No. 18/2013 before the Commission for determination of tariff for its power plant and the Commission, vide Order dated 10.07.2014, determined a single part tariff for biomass power plants using air-cooled condensers, commissioned between 01.04.2014 and 31.03.2018. The Petitioner filed a Review Petition, numbered as RP No.03/2014 before the Commission against this Order praying to revise the O&M expenses, Calorific Value of Fuel, Station Heat Rate and Fuel Price and the same was dismissed by the Commission.

(b) The Commission, in the Order dated 01.01.2015, has determined a two-part tariff for biomass projects using water-cooled condensers commissioned between 01.01.2015 and 31.03.2018, based on levelised fixed cost for the life of the project and a separate variable cost for three years ending 31.03.2018 stating that the variable cost for the subsequent period will be determined separately.

(c) Further, the Commission, vide Order dated 22.01.2015, extended the variable costs, determined to the existing biomass power projects, while

(d) The Appeal filed by a biomass power project developer, challenging the Commission’s Order dated 01.01.2015 came to be dismissed by the Hon’ble ATE in Appeal No.91 of 2015. Even a Petition filed by the Biomass Power Producers Association of Karnataka before the Commission for determination of tariff for biomass power projects (with air cooled/water cooled condenser) for the financial year 2013-14 was dismissed in OP No.18/2016.

(e) The Commission vide letter No. N/51/14/1874 dated 11.02.2015 had proposed two-part tariff for biomass power projects with air-cooled condensers and that the Petitioner vide letter dated 12.02.2015 had welcomed the proposal. The Petitioner had again, in the letter dated 12.07.2017, requested for determination of two-part tariff for its project and, as directed by the Commission in the reply, the present Petition is filed.

3) The grounds urged by the Petitioner in support of its prayer may be summed up as follows:

(a) As the Commission considered it necessary to adopt a two-part tariff for biomass projects using water cooled condensers, in view of the fluctuations in the price of biomass fuel from time to time, in the absence
of long term contracts, similar determination is necessary for biomass projects using air cooled condensers, applying the fuel cost norms as determined in the Tariff Order dated 01.01.2015.

(b) Hon'ble Appellate Tribunal for Electricity (ATE) in its Order dated 19.10.2014 in Appeal No. 207/2013 has held that it would be necessary to determine both fixed and variable components of the tariff for biomass based cogeneration plants.

(c) The Petitioner’s power plant with air-cooled condensers, is more environmental friendly, as compared to water cooled biomass power plants and promotes sustainable development replacing fossil fuels, while supporting financially the farmers who produce biomass.

(d) Biomass power plants with air-cooled condensers are less efficient and therefore, 5% higher Station Heat Rate and additional 0.78 MW auxiliary consumption needs to be considered, as compared to biomass power plants with water-cooled condensers.

(e) As per Section 61 (h) of the Electricity Act, the Commission is mandated to set terms and conditions of tariff that promote market for RE generation and two-part tariff would promote generation of electricity from biomass projects.
4) On issuance of notice, the Respondent-1 entered appearance through its counsel and filed the Statement of Objections. Respondent-2 remained unrepresented. The submissions of the Respondent – 1 may be stated as follows:

(a) The petition is not maintainable, as the Commission has passed a reasoned order in O P No.18/2013, after conducting public hearing and considering the inputs furnished by stakeholders. The Petitioner has not furnished any evidence that calls for revision of the tariff determined and has not made any grounds for adoption of two-part tariff.

(b) The Tariff Order dated 01.01.2015 is applicable only to those projects that get commissioned during the period from 01.01.2015 to 31.03.2018 and have not entered into any PPA, before the Order has come into force. Thus, the Tariff Order dated 01.01.2015 is not applicable to the Petitioner’s project, which was commissioned in the year 2014.

(c) The Review Petition filed before the Commission was dismissed and, therefore, the Petitioner’s project is governed by the Order of the Commission in OP No.18/2013.

(d) The Petitioner is granted a higher fixed cost as compared to fixed cost determined in the Order dated 01.01.2015. Further, the prayer of the Petitioner to re-determine the tariff, considering the fuel cost fluctuation, is misplaced, as the Commission, in the Order dated 01.01.2015, has noted
that there is no substantial change in the business environment after the issue of Order dated 10.07.2014. The Petitioner has not placed any records to substantiate the claim of increase in fuel costs and, therefore, reliance on Hon’ble ATE’s Order in Appeal No.207/2013 is not justified. The Commission, vide the Order dated 22.01.2015, has revised the tariff for existing water-cooled biomass power plants who had entered into PPA based on tariff Orders of 2005 and 2009, as there was drastic increase in the actual cost of fuel compared to that determined earlier.

(e) The variable cost for the Petitioner’s plant is fixed for ten years with 5% annual escalation and therefore, the question of adopting variable cost as per the Order dated 01.01.2015 does not arise.

(f) Hon’ble ATE, in the Order dated 26.05.2016, in Appeal No.87/2015, has made it clear that, in all cases, the tariff cannot be enhanced by reopening PPA. The Petitioner in the present case has not placed any material to substantiate its claim for two-part tariff.

(g) The Petitioner’s request to consider higher Station Heat Rate and auxiliary consumption, is not substantiated by any documentary proof. In fact, the auxiliary consumption of the Petitioner’s plant at 2.67%, is lower than 10% allowed.

(h) Though the Commission had proposed adoption of two-part tariff, it is submitted that it was not considered by the Commission.
5) We have heard the Counsel for the parties and perused the records. The following issues arise for our consideration:

(1) Whether the Petitioner has made out a case for determination of two-part tariff for biomass power plants with air-cooled condensers and for determination of variable cost to include not only fuel cost but other components?

(2) What Order?

6) After considering the submissions made by the Counsel for the parties and the pleadings and other material placed on record, our findings on the above issues are as follows:

7) **ISSUE No.(1):** Whether the Petitioner has made out a case for determination of two-part tariff for biomass power plants with air-cooled condensers and for determination of variable cost to include not only fuel cost but other components?

(a) It is the case of the Petitioner that the Commission’s Orders dated 01.01.2015 and 22.01.2015 give right to the Petitioner for seeking similar benefit especially when its plants are more environmental friendly though, less efficient, when compared to water-cooled biomass power plants. The Respondent has contended that the single part tariff has been determined in the Petitioner’s case after due process and cannot be reviewed.
(b) The Commission decided to adopt two-part tariff system for biomass based RE projects as also bagasse based cogeneration projects, while determining generic tariff for the new renewable energy power projects for the period from 01.01.2015 to 31.03.2018, considering the fluctuations in the price of both biomass fuel and bagasse from time to time. Support was also taken from similar approach in the CERC Regulations and tariff orders issued by a few other State Commissions, as well as the observations of the Hon'ble ATE in the judgement, in Appeal No.207/2013.

(c) It was found necessary to extend this approach to similar existing plants by the Commission’s Order dated 22.01.2015 as there was a disproportionate increase in the fuel cost than the increase that was assumed in the Tariff Orders dated 18.01.2005 and 11.12.2009, in respect of the existing biomass plants including bagasse based Co-generation plants. Therefore, the Commission revised the fuel cost for the existing biomass plants including bagasse based co-generation plants by bifurcating the earlier single part tariff into a two-part tariff, viz, fixed cost and variable cost, and to the fixed cost levelised for the life of the plants, the variable cost, as determined in the generic tariff order dated 01.01.2015, was added.

(d) We may note here that it is not as if, under the above two-part tariff approach, the biomass plants, including the bagasse based co-generation plants, were assured payment of fixed cost component of the tariff, irrespective of supply of power to the ESCOM concerned under
the PPA. It only provided for periodic revision of fuel cost component of the tariff in line with the changes in the fuel cost.

(e) The Commission, in the Order dated 10.07.2014 in OP No.18/2013, has determined the tariff for biomass power plants with air-cooled condensers taking the fuel cost at Rs.2000/tonne with 5% annual escalation and made it applicable to all biomass based power projects using air-cooled condensers, achieving commercial operation during the period from 01.04.2014 to 31.03.2018. Considering the other approved parameters, the tariff determined for ten years ranges from Rs.5.15 to Rs.6.04 per unit (average Rs.5.54 per unit).

(f) For the same reasons as recognized and accepted in the Commission’s Orders dated 01.01.2015 and 22.01.2015, we consider that there is a case for revising the fuel cost adopted in the determination of tariff for biomass power projects using air-cooled condensers and add such revised fuel cost to the fixed cost levelised for the life of the projects (20 years). Similarly, the annual escalation would have to be taken at 5.72%, as against the earlier 5%.

(g) However, we find that there is no case for revision of other parameters as sought by the Petitioner. The Commission has not considered any revision in other parameters in the case of existing biomass plants using water-cooled condensers, in the Order dated 22.01.2015. Further, the plea for modification of parameters, relating to the Station Heat Rate and specific
fuel consumption, has already been rejected in RP No.3/2014 and the Petitioner’s plea for modification of auxiliary consumption is not substantiated.

(h) Accordingly, we answer Issue No (1), as above.

8) **ISSUE No. (2): What Order?**

For the foregoing reasons, we pass the following:

**ORDER**

(a) The tariff for the existing biomass power plants using air cooled condensers covered under the Commission’s Order dated 10.07.2014 is revised as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Tariff – Rs./kWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-19</td>
<td>5.39</td>
</tr>
<tr>
<td>2019-20</td>
<td>5.57</td>
</tr>
<tr>
<td>2020-21</td>
<td>5.77</td>
</tr>
</tbody>
</table>

(b) The revised tariff shall come into effect from 01.04.2018 and all the other terms of the Commission’s Order dated 10.07.2014 shall remain unaltered;

(c) The fuel cost after 31.03.2021 will be as may be determined by the Commission;
(d) In case where the existing tariff, according to the PPA entered into as per the Order dated 10.07.2014, is higher than the tariff mentioned above, the tariff as per PPA shall continue to be applicable to such units till the tariff, determined above, exceeds the PPA tariff. Thereafter, the tariff as determined in this Order shall be applicable to such units; and,

(e) The terms of the PPAs shall be modified accordingly.

Sd-
(M.K. SHANKARALINGE GOWDA)        Sd-
(H.D. ARUN KUMAR)        Sd-
(D.B. MANIVAL RAJU)
CHAIRMAN               MEMBER               MEMBER