

CENTRAL ELECTRICITY REGULATORY COMMISSION

New Delhi

Date of Order: 05.01.2015

Coram: **Shri Gireesh Pradhan, Chairperson**
 Shri M. Deena Dayalan, Member
 Shri A. K. Singhal, Member
 Shri A. S. Bakshi, Member

Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) (Second Amendment) Regulations, 2014

STATEMENT OF REASONS

1 Introduction:

The Central Commission issued Draft Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) (Second Amendment) Regulations, 2014 vide public notice no L-1/94/CERC/2011 dated 25th November, 2014 along with Explanatory Memorandum for inviting comments/ suggestion/ objections thereon. Last date of submission of comments/ suggestions/ objections was 17.12.2014. In response to the same, 5 stakeholders submitted their written comments/ suggestions. A list of stakeholders who submitted written comments is enclosed as Annexure-I.

Subsequently, public hearing was held on 22.12.2014 to hear views of all the stakeholders.

2 Consideration of the views of the stakeholders and analysis and findings of the Commission on important issues

2.1 The following issue was proposed to be addressed through the amendment:

Use of fossil fuel in Biomass based power plants /Bagasse based Cogeneration Plants

2.2 Analysis of the views/comments/suggestions of the stakeholders and the Commission's decisions thereon are given in succeeding paragraphs.

3 Amendment of Regulation 41 of the Principal Regulations:

Commission's Proposal:

The following Proviso shall be added at the end of the Regulation 41 of the Principal Regulations, namely:

"Provided this Regulation shall come into force from 1.4.2017 and till such time use of fossil fuel is permitted for biomass projects upto 15% in terms of calorific value on annual basis"

3.1 Comments received:

- The proposed amendments cannot come into force with effect from 01.04.2017, as the principal regulations themselves are valid upto 31.03.2017 only as per regulation 1(2). **(Surya Prakasa Rao)**
- Usage of 15% fossil fuel in biomass power plants leads to additional issues of handling, increased air & water pollution levels in addition to ash disposal. It is also difficult to actually check the quantum of 15% fossil fuel usage. Therefore, the fossil fuel usage should be discouraged. CERC is therefore requested to continue with its current Regulations 41 notified on 18.3.2014 wherein usage of fossil fuel is not allowed. **(Punjab Energy Development Agency)**
- The Commission has appreciated the real difficulties faced by biomass power plant operators in operating the plants only with biomass during rainy seasons and also during drought affected times in non rainy seasons. During start up, fossil fuels can give the impetus to attain the operating conditions early and easily. It is purely with the good intention of protecting the environment to the best of our ability that we have put up the biomass power plants and to tap the possible potential clean energy sources. To run our plants with fossil fuels will be exorbitantly costly as the location of our plants are far away from sea ports, that the transport cost of mobilizing fossil fuels to our plants is very high. In such a situation if we prefer to operate our plants with little support of

fossil fuels, it is with the good intention of putting the plant to full use and also contributing our share to meet the power requirement. We request the Commission to permit use 15% fossil fuel permanently without setting time limits. **(Indian Biomass Power Association)**

- Fossil fuel/coal is used for co-firing. It acts as supporting fuel and retains the heat of biomass, thus maintaining the furnace temperature and making the process more efficient. Fossil also helps the biomass plant to sustain its operations during monsoons when the biomass is mostly wet. In biomass plants that use rice husk as main fuel, it is technically not possible to stop the use of fossil fuel, as its super heater coil gets eroded due to silicon contents in the fuel, thus reducing the machinery life. A mix of coal with husk increases the coil life and reduces maintenance cost. A biomass plant with a high Station Heat Rate (SHR) of 4200 KCal/Kwh, using coal from the market at high price, would not be viable as the coal requirement shall be much higher due to higher SHR. This would result in operational and commercial non-viability for the biomass generator. We request to clarify if this reduction in fossil fuel consumption be compensated in some form (monetary/tariff/ other), for the bio-mass generator. **(Climate Connect Limited)**
- The proposed amendment is agreeable **(CSPDCL)**

3.2 Analysis and Decision

Stakeholders like Indian Biomass Power Association, Climate Connect Limited and Chhattisgarh State Power Distribution Company Limited (CSPDCL) have supported the proposed amendment. One stakeholder viz. PEDDA has opposed the proposal while another stakeholder (Shri Surya Prakasa Rao) has raised a legal issue in terms of applicability of the regulation. The proposed amendment is aimed at providing the dispensation of use of 15% fossil fuel to the biomass based power/ Bagasse based cogeneration plants till 31-03-2017.

With due regard to the issues highlighted by MNRE and the prevailing views of the stakeholders, the Commission is of the view that "use of fossil fuel up to 15% in terms of calorific value" may be allowed as a onetime dispensation till 31.03.2017. The Commission has, therefore, decided to retain the proposed amendment in principal regulations, with the following editorial modification:-

Regulation 41 of the Principal Regulation shall be substituted as under:

The use of fossil fuels shall be limited to the extent of 15% in terms of calorific value on annual basis, till 31.03.2017.

4 Amendment to the Regulation 4 of the Principal Regulations

Commission's Proposal:

The Clause (c) of the Regulations 4 of the Principal Regulations shall be substituted as under:

"Biomass power project based on Rankine cycle technology: Biomass power projects using new plant and machinery based on Rankine cycle technology and using 100% biomass fuel sources.

Provided that this Regulation shall come into force from 1.4.2017 and till such time use of fossil fuel is permitted for biomass projects up to 15% in terms of calorific value on annual basis.

4.1 Comments received: Nil

4.2 Analysis and Decision

The Commission has decided to retain the proposed amendment in principal regulations, with the following editorial modifications:

The Clause (c) of the Regulations 4 of the Principal Regulations shall be substituted as under:

Biomass power project based on Rankine cycle technology – Biomass power projects using new plant and machinery based on Rankine cycle technology and using biomass fuel sources, provided use of fossil fuel is restricted only up to 15% in terms of calorific value on annual basis, till 31.03.2017.

5 Other Comments:

- The relevant operational parameters and likely fuel options/constraints during the next 'Control Period', as well as the then GoI policies may have to be taken into consideration by the Commission in the proceedings to be taken up for framing RE tariff regulations for the next Control Period commencing from FY 2017-18. **(Surya Prakasa Rao)**
- CERC has included State of Chhattisgarh under category of "other states" and accordingly a uniform price is being considered for Biomass fuel for computation of tariff for a particular year, after applying indexation formula. The same have been adopted by CSERC and hence the

price of Biomass fuel considered by CERC is also being made by CSERC for computation of tariff in the state. State of Chhattisgarh is one of the largest producers of Rice Husk and hence norms of CERC for other states should not be made applicable for Chhattisgarh. In fact, the actual prevailing prices of Biomass fuel in the state of Chhattisgarh are much lower and varying from Rs. 400 to Rs. 2000 per tonne against Rs. 2938.69 per tonne considered by CERC for other states for FY'15. Even the highest price for husk in the State is much lower than the price of Rs. 2942/tonne considered by CERC. It is, therefore, requested that this aspect may also be taken up for consideration for amendment and only actual prices be considered after developing a proper pricing mechanism for Biomass fuel for the state of Chhattisgarh. **(CSPDCL)**.

5.1 Analysis and Decision

The above suggestions received from the stakeholders are outside the scope of the present exercise to amend the RE Tariff Regulations. Hence these suggestions have not been considered by the Commission at this stage. However, the Commission has already stated in the Explanatory Memorandum (EM) that the normative Station Heat Rate has been specified considering the usage of 100% biomass, and that the proposal of permitting usage of fossil fuel up to 15% in terms of calorific value on annual basis might have an impact on SHR. The Commission directs the staff to examine the same separately and submit a report for consideration and suitable action in future.

(A.S. Bakshi)
Member

(A.K. Singhal)
Member

(M. Deena Dayalan)
Member

(Gireesh B. Pradhan)
Chairperson

Annexure

Name of stakeholders submitted comments on draft Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) (Second Amendment) Regulations, 2014

S.No Name

- 1 Mr. Surya Prakasa Rao
- 2 Mr. Saurabh Shrivastav
- 3 Punjab Energy Development Agency
- 4 CSPDCL
- 5 Indian Biomass Power Association