



**TELANGANA STATE ELECTRICITY REGULATORY COMMISSION HYDERABAD
5th Floor, Singareni Bhavan, Red Hills, Lakdi-ka-pul, Hyderabad 500004**

O. P. No. 15 of 2020

Dated: 21.04.2020

Present

**Sri T. Sriranga Rao, Chairman
Sri M. D. Manohar Raju, Member (Technical)
Sri Bandaru Krishnaiah, Member (Finance)**

In the matter of *Suo-Moto* Determination of Variable Cost for existing Biomass, Bagasse and Industrial waste based power projects in the State of Telangana, and having Power Purchase Agreements with the Distribution Licensees, for the FY 2019-20

ORDER

1. Section 62 of the Electricity Act, 2003 empowers the Commission to determine the tariff for supply of electricity by a generating company to a distribution licensee. Section 86 (1) (e) of the Electricity Act, 2003 mandates the Commission to promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person.
2. In exercise of powers vested in it under Sections 62 (1) read with 86 (1) (a), (b), & (e) of the Electricity Act, 2003, the Commission, through this Order, determines the Variable Cost for existing Biomass, Bagasse and Industrial waste based power projects in the State of Telangana, and having Power Purchase Agreements (PPAs) with the Distribution Licensees, for the FY 2019-20.
3. The erstwhile Andhra Pradesh Electricity Regulatory Commission (APERC) vide its Order dated 16.05.2014 in O. P. No. 32 of 2014, determined norms of operation and the indicative Variable Cost for Biomass, Bagasse and

Industrial waste based power projects for FY 2014-15 to FY 2018-19 with indicative fuel escalation of 6% and actual fuel price escalation based on indexation method to be notified by the Commission for each financial year starting from the FY 2015-16. Accordingly, the Commission vide *Suo-Motu* Orders dated 16.07.2015, 04.04.2016, 08.06.2017, and 10.04.2018 determined the Fuel Price and Variable Cost for Biomass, Bagasse and Industrial waste projects for FY 2015-16, FY 2016-17, FY 2017-18 and FY 2018-19 respectively.

4. The Commission has initiated a *Suo-Moto* exercise for determination of Variable Cost for the FY 2019-20 for the existing Biomass, Bagasse and Industrial waste based power projects and accordingly issued the Public Notice dated 11.03.2020 inviting the written suggestions and comments from all the stakeholders on the proposed norms on or before 24.03.2020 by 5 pm, which was further extended to 18.04.2020 by 5 pm. The Commission has received written suggestions and comments from two (2) nos. stakeholders within the stipulated time. The list of stakeholders who have submitted the written suggestions and comments is enclosed at Annexure 1 of the Order. The Commission has considered all the suggestions and comments received from the stakeholders.

5. In the Public Notice dated 11.03.2020, the Commission had proposed the following norms for the determination of Variable Cost for the FY 2019-20 for the existing Biomass, Bagasse and Industrial Waste projects in the State of Telangana which are having PPAs with the Distribution Licensees:

Table 1: Proposed norms in the Public Notice dated 11.03.2020

S. No.	Parameter	Units	Proposed for FY 2019-20		
			Biomass based power projects	Bagasse based power projects	Industrial Waste based power projects
1.	Station Heat Rate	kcal/kWh	4200	3600	4200
2.	Auxiliary Consumption	%	10%	9%	10%
3.	Gross Calorific Value	kcal/kg	3100	2250	3100
4.	Fuel Price	Rs. / MT	3168	1788	3168

S. No.	Parameter	Units	Proposed for FY 2019-20		
			Biomass based power projects	Bagasse based power projects	Industrial Waste based power projects
5.	Variable Cost	Rs. / kWh	4.77	3.14	4.77

6. The suggestions and comments filed by the stakeholders and Commission's views thereon have been summarised issue wise as detailed below:

Issue No. 1: Variable Cost determination for FY 2019-20

Stakeholders' submission

7. The Variable Cost may be determined for a period of 5 years from FY 2019-20 to FY 2023-24.

Commission's view

8. The Commission observes that the Central Electricity Regulatory Commission (CERC) (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2017 stipulate the Control Period from FY 2017-18 to FY 2019-20. CERC in its Notification dated 24.03.2020 has extended the period of applicability of the Regulations till 30.06.2020. CERC is yet to notify the Regulations on Terms and Conditions for Tariff determination from Renewable Energy Sources for the Control Period starting from FY 2020-21 onwards. Therefore, the Commission deems it appropriate to determine the Variable Cost for the FY 2019-20 alone at this stage.

Issue No. 2: Auxiliary Consumption for Bagasse based power projects

Stakeholders' submission

9. The auxiliary consumption of Bagasse based power projects may be considered as 8.5% in accordance with the CERC norm.

Commission's view

10. The CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2017 stipulate the auxiliary consumption norm of 8.5%. This norm shall be applicable for the new projects commissioning during the Control Period as specified in the Regulations i.e., FY 2017-18 to FY 2019-20. The erstwhile APERC in its Order dated 05.08.2014 in O. P. Nos. 8 of 2011, 9 & 12 of 2012, 22 & 25 of 2014, in determination of Fixed

Cost for 11-20 years of operation for Bagasse based power projects has considered the auxiliary consumption norm of 9%. Further, the auxiliary consumption norm of 9% has been considered in determination of Variable Cost for the existing Bagasse based power projects till FY 2018-19. As the Commission is determining the norms for the existing projects in this Order, the Commission finds it appropriate to consider the auxiliary consumption norm as 9% for Bagasse based power projects for the FY 2019-20.

Issue No. 3: Fuel Price

Stakeholders' submission

11. CERC in its Order dated 19.03.2019 in Petition No.1/SM/2019 has approved the Fuel price for Biomass projects for Maharashtra as Rs.3687.69 / MT for the FY 2019-20. The Fuel price for the FY 2019-20 for the Biomass projects may be considered at Rs.3687.69 / MT as approved for neighbouring State i.e., Maharashtra and escalate the same by 5% for subsequent years.

Commission's view

12. The CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2017 do not stipulate the Fuel price for Biomass projects for Telangana State separately. The Regulations only stipulate the Fuel price for Andhra Pradesh. The Commission has written a letter to CERC seeking clarification regarding the Fuel price for Telangana State but did not receive any reply in this regard.
13. CERC in its Order dated 19.03.2019 in Petition No.1/SM/2019 has determined the Fuel price for Biomass projects for Andhra Pradesh at Rs.3167.72/MT for the FY 2019-20. This price was also adopted by the Andhra Pradesh Electricity Regulatory Commission in its Order dated 10.02.2020 in O. P. No. 75 of 2019. As Telangana State has been carved out of Andhra Pradesh and the projects in both the States have been supplying power at par to the respective Distribution Licensees till FY 2018-19, the Commission deems it appropriate to consider the Fuel price for the FY 2019-20 for the existing Biomass projects as proposed in the Public Notice.

VARIABLE COST DETERMINED BY THE COMMISSION

14. Based on the above, the Commission approves the following norms for

determination of Variable Cost for the FY 2019-20 for the existing Biomass, Bagasse and Industrial Waste projects in the State of Telangana, which are having PPAs with the Distribution Licensees:

Table 2: Approved norms for determination of Variable Cost

S. No.	Parameter	Units	Approved for FY 2019-20		
			Biomass based power projects	Bagasse based power projects	Industrial Waste based power projects
1.	Station Heat Rate	kcal/kWh	4200	3600	4200
2.	Auxiliary Consumption	%	10%	9%	10%
3.	Gross Calorific Value	kcal/kg	3100	2250	3100
4.	Fuel Price	Rs. / MT	3168	1788	3168
5.	Variable Cost	Rs. / kWh	4.77	3.14	4.77

APPLICABILITY

15. The Commission directs the Distribution Licensees namely Southern Power Distribution Company of Telangana Limited (TSSPDCL) and Northern Power Distribution Company of Telangana Limited (TSNPDCL) to pay the above Variable Cost for the power purchased from Biomass, Bagasse and Industrial waste based power projects in the State of Telangana for the FY 2019-20.

This order is corrected and signed on this the 21st day of April, 2020.

Sd/- (BANDARU KRISHNAIAH) MEMBER
 Sd/- (M.D. MANOHAR RAJU) MEMBER
 Sd/- (T. SRIRANGA RAO) CHAIRMAN

**ANNEXURE 1 – LIST OF STAKEHOLDERS WHO SUBMITTED WRITTEN
SUGGESTIONS AND OBJECTIONS**

S. No.	Name of the Stakeholder
1.	M/s Southern Power Distribution Company of Telangana Ltd., #6-1-50, Corporate Office, Mint Compound, Hyderabad – 500 063
2.	Biomass Energy Developers Association, No. 13, 4 th Floor, Maitri Arcade, 2-3-42/52, M. G. Road, Secunderabad – 500 003