



Waste to Energy Research & Technology Council
(WTERT - India)

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To,
The Secretary,
CERC,
Chanderlok Building,
36, Janpath,
New Delhi-110001.

Date:- 14th March 2024

Sub : Draft Central Electricity Regulatory Commission (Terms & Conditions for Tariff determination from Renewable Energy Sources) Regulations 2024
Ref : RA -14026(11)/1/2023-CERC dated 17.2.2024.

Dear Sir,

WTERT-India (Waste to Energy Research & Technology Council) part of Global WTERT Council (GWC), with its chair situated at Earth Engineering Centre, Columbia University, New York, USA, established in 2011. WTERT works with various academia & industry, facilitating an interaction for the benefit of the waste management. WTERT-India is a Non-Profit Organization, working as Trust, registered in 2014 with the Charity Commissioner of Maharashtra, Mumbai office.

The mission is to identify best available Technologies for the Treatment of various waste materials, undertake Research activities and disseminate the information by means of Publications, Meetings, Conferences and Workshops. The guiding principle of WTERT-India is to have an effective Waste Management System, providing cost effective solutions and assisting industries and Govt. agencies in implementing technologies to achieve effective waste Management in the Country.

Till now, WTERT India have conducted 11 International conferences & Seminars in major cities of India like Mumbai, Delhi, Surat, Hyderabad, Bangalore. As hand on training of collection of Municipal Solid Waste followed by Waste characterization studies conducted for 9 Major cities in professional manner in India.

After holding one day brainstorming workshop at Institute of Chemical Technology, Mumbai for Municipal Corporation officials & Pollution Control Board, Maharashtra officials, we have now moving towards organising “**Training for the Engineers and Professional in WTE Sector**”. WTERT-India is in the process of updating website www.wtert.in.

Now, our submission before CERC is that the Municipal Solid waste is a Heterogeneous discarded Materials and its composition & Characteristic changes (Calorific value, Moisture content etc.) from place to place and unless segregated at source or pre-sorting is done at Processing facility it cannot be further process. Therefore, there is every uncertainty in end products may be compost or electrical energy through Incineration Plant, Thus it cannot be compared with Power Generation in Biomass to Incineration. Moreover, the WTE Plants particularly for Urban waste disposal needs support from GOI to make it Sustainable for 20-25 years.

Further, the proposal of direct Incineration of Municipal Solid waste (MSW) as collected without any pre-processing, known as “Mass Burn Incineration” (though technically feasible and practiced in Advanced countries like PR China, Europe, Japan etc. successfully implemented mainly due to effective segregation at source), but in India it is a violation of the SWM Rules 2016 by avoiding the costs of pre-sorting the Mixed MSW, wet waste treatment, harnessing of RDF, recovery & recycling and sanitary landfilling in compliance with SWM rules 2016. (15 (v) page 59)

Being a statutory body, CERC cannot be seen in proposing a method of disposal called “Mass Burn Incineration” which ex-facie a violation of SWM Rules 2016, Gazetted by Government of India. Therefore, it is requested that CERC may review its classification.

Further, it is also humbly submitted that SERC's across India should also desist from approving the competitive Tariff as a Bidding Parameter, which is contradictory towards the "National Tariff Policy 2016".

Comments & Suggestions:-

Background

In 2015, CERC has in its order, stated as under.

MSW Projects are estimated at a capital cost of Rs 15 Cr /MW and 40% of such capital cost is proportioned for Processing of MSW and as a result, there is no fuel cost for MSW projects. On the other hand, Waste to Energy projects based on RDF are estimated at a cost of Rs 9 Cr/MW with a fuel cost of Rs 1800/ton of RDF is fixed payable to those agencies from whom the RDF is procured. Thus, RDF based plants are akin to Biomass power plants, where generating companies will procure RDF from MSW processing companies.

Capital Cost

Capital costs for "Waste to Energy" are still nascent with only 12 operating plants in India from 2012. Hence, the capital cost for "Reciprocating Grate Type", Rankine cycle plants is generalized to be Rs 22-26 Cr /MW, which may be considered by CERC.

Flue Gas Treatment

Included in the above.

Aux consumption

Up to 15%.

Project Life

Useful life shall be considered as 25 years, after which the further operation requires large scale refurbishment.

PLF

80% may be considered. However, "National Tariff Policy" stipulated 100% procurement by DISCOMs.

Station Heat Rate

SHR and GCV are generally not considered as parameters for tariff determination for "Waste to Energy Plants".

TARIFF

A tariff of minimum of Rs 7.50 /kwh is to be prescribed for WTE power to be mandatorily procured by DISCOMs in the concerned state. "National tariff Resolution Dated;- 28th January 2016" is to be prescribed by CERC. (6.4 ii page 29-30)

The WTE facility comprises of sorting, taking out combustible fraction of Mix Waste process of Biodegradable Waste, Incinerate combustibles, evacuate the power and deposit process Remnants in Scientific landfill including its Capital & O&M cost the "Tipping Fee" paid for compensate the expenses including Statutory Compliances shall not be termed as **Revenue** for the Developer Agency.

Regards,

JN ✓ *14/3/24*
D.M.Shrotriya,
President,
WTERT-India