

Submission by Shri Amit Bajpai on behalf of M/s AVERDA

The Secretary,
Central Electricity Regulatory Commission
3rd and 4th Floor, Chanderlok Building,
Janpath, New Delhi-110001

Kind Attn: **Sri Harpreet Pruthi, Secretary**

Dear Sir,

In continuation to our email below, we are sharing the following points to be considered for generic tariff determination of a Waste to Energy Plant in India.

1. Project cost @ INR 18 cr/MW for MSW based is not realistic at all. Preprocessing is an integral part of even an MSW based WtE to achieve specific GCV level before incineration/combustion. Besides the overall cost of BTG +BOP package is much higher than mentioned in draft policy. There needs to be some basis to it and line-item wise cost feedback should be taken from all developers. Otherwise, the consultant has to advise the basis of project cost of Rs.18 crores/MW.
2. The conservation cost of a WtE is now INR 25 crores per MW. Rs.18 crores was determined somewhere in 2018. Since then, the price of Steel, Cement, Diesel, Transportation, Minimum wages all have risen manifold. Many parts of a WtE are still imported and even INR/USD devaluation has seen significant north side in the last 5 years. 100% specialised steel is used in all plant and machinery equipment of a WtE with special alloy required for boiler grate castings. Specialised bags for Flue gas cleaning system in Bag filter are imported to achieve better quality
3. All exclusions like SLF etc should be mentioned. If evacuation system plus transmission line is a part of Project cost, then it may vary depending on the vicinity of the substation.
4. WtEs are normally provided treated water through local STP. STP pipeline laying is often in the scope of concessionaire. The distance of pipeline laying to the source of water is another major cost which needs to be added for tariff determination, else a clear exclusion should be provided by CERC while determining generic tariff.
5. The Interest rate @ SBI MLCR plus 200 bps is highly unlikely on project financing basis, without recourse to promoters or holding company. All lenders seek credit enhancements for lowering the rates, and mere step in or substitution rights are no financial recourse these days for lenders. Hence Interest rate should be kept at 12% minimum.
6. The ROE @ 14.5% post tax in a developing but highly regulated economy like India is too low to attract investors or developers. Unlike coal, solar, wind, hydro, biomass etc, the WtE sector has other challenges as well and all investors are often not keen to invest. We are living in a high interest rate and high inflation regime in India. As such the ROE should be reasonable to attract Funds, PE, and Private investors. There are not many corporate developers in WtE sector in India, hence this needs a relook.

7. While Interest during construction period (IDCP) is part of project cost, the ROE is calculated post COD, whereas lenders require prorated equity investment during construction period. Hence ROE formulae need some adjustment.
8. MAT applicability for entire concession period needs to be examined as it affects ROE.
9. The O & M at 6.5% is being pushed since inception of the CERC WtE tariff guidelines. There is a compulsion of preprocessing so as to reach a minimum calorific value requirement for MSW based WtE plants. O & M of SLF or in case out of scope, the transportation of ash and rejects is a cost which will vary, but should be at least specified, so that it doesn't become a debatable point. Major maintenance cost every 5 years should be considered as it requires major shut down. Minimum 8% O & M cost of only WtE plant should be considered indexed with WPI and CPI inflation, with a major maintenance of 5% every 5 years.
10. Auxiliary consumption of 15% is okay for plants having capacity of 15 MW and above. However, the Aux requirement for lower capacity WtE plants would be higher at 18% or more.
11. It is better to provide for at least 10% or more Alternative fuel e.g. Biomass for a WtE Plant. As such fuel cost to that extent should be kept and it is advisable.
12. In case Bioremediation and land reclamation is part of a WtE whether for Plant or for SLF/LTP system, it should be a clear directive to Discoms/State ULBs and Urban Development departments to consider it as a part of tariff determination.
13. Last but not the least, CERC should advise all State ERCs that obtaining an NOC and signed draft PPA from Discom's should not be made obligatory for filing tariff petition in case of WtEs not being developed through tariff bidding route, but based upon concession agreement provision. Many projects are stuck in the middle as developer is unable to file tariff petition despite the WtE DPR being cleared by state Nodal Agency, ULB, and State Urban development department.

We look forward for a positive and early response to our submission and invitation to us to attend the Public Hearing.

Regards,

Amit

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