DETERMINATION OF THE PRICE OF RDF FOR BILLING PURPOSES

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Discussion by

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The authors are to be commended for extending the control volume concept to deal with a technically controlled econometric problem. Despite the complex appearance of the formulas, they are based on easily measurable quantities and this should lead to an unambiguous, workable system.

Upon reviewing the equations in the Appendix, it appears to me that the authors may have needlessly complicated the boiler efficiency calculation. My experience indicates that determining RDF mass flow and heating value (except over long averaging times) is difficult and inaccurate. I have had good experience, however, developing an efficiency algorithm as a function of steam flow, flue gas oxygen and temperature leaving the last heat trap, bottom ash burn-out, and the mass firing rate of the conventional fuel in a multi-fuel firing situation. Did the authors try such an approach? If so, to what affect?

I also noted that the Navy pays incremental operating and maintenance costs for RDF firing compared to a conventional coal-fired power plant. How are these costs determined?

Now that this payment system has been in use for about a year, are there any major changes that you would recommend someone setting up a similar system incorporate?

Discussion by

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The paper presents a useful approach to determining the value of refuse-derived fuel. If the plant is now on-line, I would be interested in knowing what the purchase price of RDF has actually been. How much per million Btus? What has been the quality of RDF, heating value, ash and typical moisture content?

What is the tipping fee for waste disposal charged by the RDF plant? Also, what is the term of the RDF contract based on the formula?

The determination of the value of RDF on the basis as described in the paper may not be too meaningful in areas of the country experiencing very high waste disposal fees. In those areas, when dealing with private industry regarding RDF use, it is now being recognized that the material is a waste. Firms are now looking at

the material to be provided at no cost or even require a tipping fee for its use.

The economics of waste disposal in the northeastern U.S. have begun to make industries recognize potential for the realization of significant cost savings by "cashing in" on the landfill shortage and high disposal costs.