Maximizing Energy Revenues – Providing the Best Incentive to the Contract Operator

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ABSTRACT

Communities that own waste-to-energy (WTE) facilities rely heavily on the revenues generated by their facility to help pay for the costs to finance, operate and maintain these facilities. The two primary revenue streams are tipping fees and energy sales, generally in the form of electricity. While communities often retain all of the tipping fee revenue, revenue from the sale of energy is nearly always shared with the contract operator. In some cases the shared energy revenues include both capacity and electricity payments. The basis of this strategy is to offer the contract operator an added incentive to maximize this revenue stream through more efficient operation and, in the case of capacity payments, to meet certain capacity commitment criteria required by the energy purchaser. This strategy recognizes that the contract operator has some degree of control over the factors that affect energy production.

Under most existing service agreements, which date back to the 1980s, energy revenues are shared on a 90/10 basis, with 90 percent going to the community. Now that many of these service agreements are coming up for renewal or are expiring, communities will need to revisit how best to share energy revenues with the contract operator in order to maximize the total revenues retained by the community. This paper analyzes several different approaches to sharing energy revenues in light of the operational experience gained over the past 20 plus years and concludes that, while energy revenue sharing is still in the best interest of the community, the widely employed strategy of a 90/10 split may not offer the best incentive, and therefore may not lead to the maximization of energy revenues to the community.

INTRODUCTION

As of 2004, there were 89 WTE facilities operating in the United States [1]. Most of these projects were developed in the 1980s and early 1990s and are approaching 20 years of operation. More than one-third of the WTE facilities are publicly owned, with the vast majority of these plants being operated and maintained by private firms under 20 or 25 five year service agreements. The contract operator's compensation typically consists of either an annual service fee or a processing fee for each ton of waste processed and, in many cases, a share of revenues from the sale of energy and metals recovered from the waste and/or ash streams.

Most of the original service agreements for publicly owned facilities will be coming up for