

**David O'Connor**  
**Commissioner**  
**Massachusetts Division of Energy Resources**

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If I could wave a magic wand, I would equip every building in Massachusetts with a time-of-use meter. This would do more to foster retail competition and deliver value to residential consumers than any other policy or economic initiative.

We all know that electricity prices at the wholesale level vary dramatically hour by hour and day by day. Yet, ironically, there is no variation in most retail rates depending on the hours of day or the day of the week when electricity is consumed. This is partly caused by the fact that most customers do not have the time-of-use meters needed to keep close track of consumption.

As we all are painfully aware, the current system encourages consumers to use more during peak demand periods than they would if they were aware of the real cost to provide the electricity. At the same time, it encourages consumers to consume less than they would during times when its real cost to them should be far lower than their retail rates would suggest.

All customers should be provided with time-of-use meters, not only because the system benefits outweigh the system costs. We all know that reducing system peak demands with real-time pricing helps not just the customers that do it, but all customers. It avoids the need to continuously upgrade peaking capacity in both generation and the T&D infrastructure. These benefits alone would justify the cost of new meters and new billing infrastructure.

But more importantly, the societal benefits would vastly exceed the societal costs. There are huge productive but untapped efficiencies waiting to be unleashed on the customer side of the meter. Technologies are now readily available that would allow consumers to program the operation of their buildings and appliances and electronic equipment to capture far more value at much less cost than is now the case.

Competitive suppliers would rush to make these technologies and service options available if they were not constrained by current meters and their inefficient, out-dated progeny: uniform rate design. It is said that customers want such flat rate designs. It is true that it is hard for most customers to envision what they have never experienced, to imagine the benefits of different pricing plans when lifestyles have to change to take advantage of them.

But experience in every commodity market known has shown that when a product or service can be crafted to accommodate a unique customer preference (such as when I use it or what I use it for) consumers will be able to extract tremendous value from those

commodities which were never visible when they were priced the same way for all customers all the time.

There are two things that distinguish the value of one supply of electricity from another: the fuel used to create it and the time when it is created. REC's have made it possible for consumers to buy electricity that is distinguished by its fuel type. That has allowed for different pricing and consumer choice. But how can a consumer ever capture the value of the when it is created without a time-of-use meter? Electricity cannot be stored. It must be used when it's created. If there's too much it's worthless and can be given away and if there's too little its value seems to be priceless. Without meters that can tell when I use electricity, it can never be infused with its inherent value, which changes constantly, hour by hour, day by day and season by season.

Isn't this the information age? Why are we still unable to know how much electricity we use when use it and what we use it for? This is an absurdly simple information management problem. All the technology necessary to do it and make it readily available to the customer is at hand.

Why, you might ask, if there is so much untapped value, doesn't the competitive market install the meters? The answer is simple: economies of scale and split incentives. It is ridiculously expensive to install the meters one by one, and, no competitive supplier can be sure a customer would stay with him long enough to allow recovery of the installation cost, let alone a profit.

Therefore, distribution companies should be required to install these meters for every single customer as soon as practicable. They should be allowed to recover the costs in their distribution rates, or if not there because of rate caps, in their "transition" rates (finally giving real meaning to the nomenclature). If there are demonstrable stranded costs incurred in the replacement of the current meters or billing operations, they should be allowed to recover those costs, too.

An ability to correlate retail prices with wholesale prices, through various forms of dynamic pricing, would make more efficient use of generation resources, more use of demand resources, better utilize the distribution system and minimize the use of natural resources consumed by electricity production. Time of use pricing, and the meters necessary to accomplish it, is an idea whose time has long since come. Let's get on with it.

Thank you.