

Your Inquiry

We are looking for information on prepayment metering. What are the benefits of these systems? What issues do they raise? Are there some recent developments or trends we should know about?

Our Response

Prepayment metering (sometimes called "prepaid metering" or "prepay metering") has attracted the attention of utility companies globally, with more than 40 countries using such systems extensively. Prepayment programs have been slow to catch on in North America because the business case for them is not fully established. Utilities in the U.S. and Canada are still weighing potential benefits such as enhanced customer service and reduced losses from high-maintenance, payment-troubled customers against the significant investments they would have to make in technology and back-office integration. Furthermore, manufacturers and vendors of the prepayment metering solutions face an uncertain market, so it is difficult to predict long-range pricing or to draft dependable service contracts for the metering units.

Proponents emphasize valuable benefits in the areas of costs, customer relations, and conservation. When they are successful, prepayment metering programs provide advance cash flow for utilities while minimizing the costs of billing, meter reading, service disconnections and restoration, and collections. Programs can be structured to retire existing customer debt while preventing future customer debt. Customers gain real-time awareness of their energy consumption, which empowers them to conserve energy and save money. Since we last examined this area in 2003, some promising case studies have emerged. In addition, the Energy Policy Act of 2005, with its incentives for energy efficiency home improvements made by consumers, signals a changed regulatory climate that encourages innovation in options for service delivery.

Public utilities have been quicker to adopt the systems than investor-owned companies. Salt River Project, a public utility providing water and electricity in the Phoenix, Arizona, metropolitan area, launched its M-Power prepayment metering program for residential customers in 1992. Fifteen years later, Jennie King, Principal Planning Analyst claims the program has achieved an unexpected level of popularity. Customer surveys indicate a 90% satisfaction rate among participants, with 95% of them saying they feel they have achieved better control of their energy use. She points to a 12.8% reduction in electricity consumption by M-Power customers, evidence that prepayment metering helps the company reach its sustainability goals and its aim of promoting conservation behaviors among consumers.²

Critics of prepayment metering claim that the systems prey on low-income customers by expediting shut offs and, where the programs are involuntary, forcing them to pay fees that other consumers are not required to pay. Consumer advocates have challenged utility pilots with government bodies in Washington, Kentucky, Nevada, and Ontario.^{1,3}

Utilities have taken two approaches to answering the challenges: First, they position prepayment programs as "premium" plans that provide all customers opportunities for more convenient service at a reasonable additional cost. Second, they proactively differentiate between low-income customers, who are often eligible for discounts and

other types of assistance, and that specific group of customers who are payment troubled. Cultivating relationships with consumer advocates helps, too. King garnered the support of City of Phoenix caseworker Marcie Widmer. Citing M-Power's flexibility in providing for clients to combine debt repayments with deposits, Widmer called it "a useful tool to help the client become stable."²

Should you decide to pursue prepayment metering, here are some tips from program managers and vendors we asked for advice:

- Make the program voluntary and offer it to all customers. Emphasize the payment flexibility and other benefits to consumers.
- Prepare for resistance from both inside and outside of your company. Elicit executive buy-in and identify an internal project champion. Anticipate the concerns of community advocates and invite them to give input.
- Take care when choosing a vendor. Identify backup vendors and develop contingency plans you will activate should the vendor you choose leave the business.
- Train your employees to give thorough and accurate information to customers. Set up a dedicated hotline during the pilot phase of the program.
- Integrate your back office system with the meters so that you can automate account set up and other functions. This is critical if you wish to realize the potential savings rather than generate additional costs for the manual transfer of information.
- Be creative about vending credits; consider multiple vending options. There are two basic types of systems. One type of lets the customer enter a code into a keypad on the meter to add credit. In the other type, customers purchase tokens, keys, or cards that upon insertion to the meter add credit and extract data. The customer recharges the card at a vending station, which extracts that data and transfers it to a Central Management System (CMS). Solutions vary in the ease of installation.
- Invest for the long haul. It may be some time before you reach payback and see the benefits of accrued customer good will.

Sources

1. Behringer, Alexandra, "The Evolution of Prepayment Metering in North America: Update 2003", Platts Research and Consulting, 2003
2. King, Jennie, "M-Power: A Better Way to Keep Customers in Power", 2007 (Energy Central's Energy Pulse, http://www.energypulse.net/centers/article/article_display.cfm?a_id=1406, accessed 6/13/08)
3. Testimony to the Public Utilities Commission of Nevada by John Howat, Senior Energy Policy Analyst, National Consumer Law Center, Boston, MA, 2004 (accessed 6/13/2008 at http://www.nclc.org/issues/energy_and_utility/content/NevadaJH_june04.pdf)