

EXAMINING POTENTIAL FOR PREPAY AS AN ENERGY EFFICIENCY MEASURE IN MINNESOTA

FACT SHEET

PREPAID ELECTRICITY

Prepay electricity plans require customers to pay for their electricity in advance of receiving service. These plans re-conceptualize the electricity provision system and turn it from a service paid for after the fact to a service paid for in advance. This program model is controversial because low-income customers represent a sizable proportion of participants in such programs, and consumer advocates have raised concerns regarding potential negative effects on this vulnerable population. Nevertheless, prepay advocates suggest that these programs could reduce electric consumption while increasing utility revenues and customer satisfaction.

Prepay electricity plans allowing multiple payment options have existed since the 1980s and are prevalent in many areas of the world. In Minnesota, one utility currently offers a prepaid electricity option. Two others have either considered or implemented and terminated their plans. Importantly, Minnesota defines energy efficiency as reducing energy consumption without reducing “the quality or level of service provided to the energy consumer.” More research is needed to determine if prepaid electricity plans meet this definition.

Potential costs to customers	Potential benefits for customers
<p>Potential additional costs associated with rates and fees</p> <p>Payment may be less convenient if travel or multiple payments are required</p> <p>Potential health or safety effects from going without electricity more frequently</p>	<p>Reduced electricity usage</p> <p>Increased knowledge about how behavior relates to electricity use and electricity costs</p> <p>Increased sense of control due to flexibility of payment</p> <p>Allow budget-constrained customers to continue getting power by avoiding deposits or paying for arrearages over time</p>
Potential costs to utilities	Potential benefits for utilities
<p>Investment in necessary infrastructure, including AMI, call centers, prepay software, and communication systems</p> <p>Administrative costs including marketing and legal services</p> <p>Time and financial investment associated with gaining regulatory approval</p> <p>Negative attention from media or consumer advocates</p>	<p>More efficient revenue recovery</p> <p>Avoided costs associated with paper billing, collections and termination</p> <p>Improved customer satisfaction</p> <p>Utility meeting its mandate to leverage advanced metering infrastructure technology</p>

MORE INFORMATION

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Final Report Available Online: [Potential for Prepay as an Energy Efficiency Program in Minnesota](#)
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ENERGY SAVINGS

Customers on prepaid electricity plans likely use less electricity than they would otherwise. On average, the estimated electricity usage reduction is approximately 9% (based on 16 evaluations from 10 reports), but many evaluations may not generalize to a broad Minnesota population and may include savings from electricity shut-offs. In addition, more research is needed to estimate savings potential under different scenarios (e.g., to understand potential energy reductions if the program design had no disconnection threat).

COMPARING PREPAY AND POSTPAY PLANS

Characteristic	Prepaid plan	Postpaid plan
Payment arrangements	Customers pay for their electricity before using it.	Customers typically pay for their electricity <i>after</i> using it, usually with a delay of about three weeks to two months.
Feedback on energy consumption	Customers receive frequent feedback about their electricity use.	Customers may receive feedback in monthly bills or through home energy reports.
Disconnection	Customers are remotely shut off from electricity services shortly after running out of credit.	If customers do not pay their bills, they can accumulate arrears for a longer period before being shut off.
Costs and deposits for initiating services	Sometimes plans offer lower (or no) fees for connection or reconnection or initiation of electricity services.	Postpay plans often require a deposit or credit card before service can be initiated.
Rate structure and overall costs	Fees vary. In the United States, rates are not usually lower than postpay rates. Some customers can receive access to time-of-use rates.	May have tiered or time-of-use rate designs. In the United States, overall costs are usually the same or lower than prepay, but they are somewhat comparable.

RECOMMENDATIONS

1. Convene a stakeholder advisory group to help create a program that addresses both research questions and consumer protection issues
2. Hire a neutral third-party evaluator to help design a program evaluation that examines if, how and why energy is saved
3. Assess all program costs and benefits, including those to participants and society
4. Develop a comprehensive communications campaign that not only markets the program, but also educates customers on potential costs and benefits



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