

Anticipating the Communication Costs Associated with Prepaid Utility Services

By: DEFG LLC and Exceleron Software, LLC A project of the Prepay Energy Working Group October 2013



Introduction

Utility service providers across the U.S. are offering a prepaid model in which customers purchase electricity before they use it. Customers begin with a positive account balance and the prepaid account management system monitors daily usage and deducts the corresponding consumption charge.

The prepaid option allows customers to choose the amount and frequency of payments, thereby obtaining greater control over their consumption and expenses. In fact, a recent study sponsored by the Prepay Energy Working Group found that prepaid energy customers at Oklahoma Electric Cooperative have reduced their energy usage on average by 11%.¹ The average monthly bill for OEC's customers is \$146, so this 11% savings implies a \$192 per year reduction in a customer's bill. This study affirms that regular and actionable communication regarding consumption yields monetary benefits and a shift in energy usage. At the same time, utility service providers experience lower write-offs and bad debt.

Prepaid programs succeed because they put information into customers' hands through email, phone calls, text messaging, and/or web platforms. Yet all that communication comes at a cost. The members of the Prepay Energy Working Group collectively considered anticipated costs and benefits associated with the implementation and continued support of prepaid service (*see* Table 1: Business Case Elements below), and noted an increase in customer communication as a critical issue that needed to be explored.

Table 1: Business Case Elements

Utility Avoided Costs:	Prepaid Service Cost Items:	Additional Benefits:
 Utility Avoided Costs: Manual meter reads Prep and send bills Prep and send disconnect notices by mail Representative calls to request payment extensions Disconnect / reconnect costs Debt write-offs Expense of PSC, executive & management complaint handling for deposits & billing issues Potential to avoid new generation 	 Prepaid Service Cost Items: Software installation Software recurring costs Training / rollout Marketing Education & communications Smart meter installation Frequent phone/text alerts Loss of disconnect & reconnect fees Loss of late payment fees Potential loss of money due to reduced usage 	 Additional Benefits: Improved member satisfaction Reduce CSR & billing rep burnout / potential employee losses Potential to be significant piece of demand side management / EE portfolio

¹ Source: "The Effect of Prepayment on Energy Use," a report of the Prepay Energy Working Group, DEFG LLC, Washington DC, March 2013 (available upon request, contact: <u>codwyer@defgllc.com</u>). Distributed Energy Financial Group LLC (DEFG), a specialized consulting firm focused on energy consumers, manages the Prepay Energy Working Group. Currently in its fourth year, the Prepay Energy Working Group sponsors in-depth research exploring the challenges and opportunities presented by prepaid energy offerings in the North America. To ensure a broad spectrum of perspectives and experiences, working group members include utilities, energy retailers, regulators, consumer advocates, and metering and software solution vendors.

This white paper is a joint effort between DEFG and Exceleron Software to provide data and analysis regarding the relative popularity of different types of communication channels for prepaid account information and their associated impacts and costs.² The objective is for service providers to be able to better anticipate communication costs and formulate a strategy as part of a broader prepaid service business case analysis.

The Need for Communication

Effective prepaid programs allow customers to access information about their account and their consumption history at any time through *inbound customer services* and *online platforms*. At the same time, prepaid programs must be able to generate automatic *alerts and notifications* to inform customers of their remaining balance, pending disconnects, actual disconnects, account credits for payment received, and reconnections.

Inbound Customer Services & IVR

The success of any prepaid account program depends on the ability of customers to access their current account status and consumption at any time. Therefore, effective prepaid programs must offer reliable inbound customer services that allow customers to obtain the information they need. Inbound customer services are most commonly offered through an interactive voice response (IVR) telephone system, but two-way texting is becoming increasingly popular.

Telephone IVR

Certain customer groups, particularly the elderly and low-income populations, prefer to access information regarding their prepaid accounts via telephone. Some of these individuals prefer to speak with customer service representatives. However, an *interactive voice response (IVR) system* provides greater flexibility at a lower cost and allows customers to access their account information via telephone any time, day or night. If the IVR is connected directly to the prepaid account management system, it can provide real-time information to customers who enter their account number and password.

The IVR cannot provide a full transaction history or a detailed consumption history like the web portal can, but does allow customers to access the most critical information, such as current account balance, consumption for the past three days, and the nearest payment locations.

Two-Way Text Messaging

Other customer groups, particularly college students and young adults, prefer to receive their account information via text messaging. *Two-way texting capabilities* allow customers to request account information by sending a one-word text message and the system to automatically reply with the data. For example, a customer might send "BAL" to request the current balance of the prepaid account.

Online Platforms: Web Portal & Mobile Apps

Effective prepaid programs must also offer a comprehensive **web platform** with a simple user interface that provides direct access to the most commonly sought-after account information. Typically, a password-protected web platform provides access to the information presented below in Table 2, customized for each accountholder.

² Exceleron Software's MyUsage platform has been managing prepaid account systems for more than seven years, and currently manages more than 70,000 prepaid accounts for its utility clients. The data therefore reflects the preferences of this collective customer base, and thus the demographic makeup of the 70,000 customer accounts.

Type of Information	Description
Current usage summary	Indication of daily or weekly consumption and the remaining balance
	in the prepaid account
Detailed usage history	Graphical or tabular display of consumption over time periods
	specified by the customer, often overlaid with local temperature data
Transaction history	Detailed information about daily credits and debits affecting the
	prepaid account balance, including reconciliation adjustments
Alert management	A list of all alerts that have been generated for the customer, including
	the alert type, date and time, vehicle (email, telephone or text
	message), and delivery status
Account profile	Basic account information, including the ability to update contact
	information, user preferences, and the password for the web portal.

Table 2: Information Commonly Displayed in Web Portal for Inbound Customer Services

The web portal should also contain a link that allows customers to deposit funds into their prepaid account from a credit card, debit card, or bank account.

As smart phones and tablets become increasingly popular, customers appreciate *mobile applications* that resemble the full web portal, but allow quick access to similar information on a smaller screen. Such mobile applications can also be rooted in social media, such as Facebook apps.

For illustration, the Appendix to this white paper contains screenshots of the web portal and mobile apps for Exceleron Software's MyUsage prepaid account management system.

Alerts and Notifications

While customers are encouraged to access their account information and consumption history at any time through the inbound customer services, web portal, and mobile applications described above, a prepaid program also requires the ability to push alerts to customers to notify them of important information, such as pending disconnects. Table 3 lists the types of alerts and notifications commonly generated by prepaid programs.

Type of Communication	Description				
Daily balance	Informs customers of their current balance and usage as of the latest				
Daily balance	meter reading				
Daily usage	Informs customers of their daily consumption				
Disconnect	Notifies customers when service has been disconnected				
High usage	Notifies customers when consumption is unusually high				
Low balance	Notifies customers when their balance reaches a predetermined				
	amount established by the customer				
Pending disconnect	Notifies customers when their account is subject to disconnect				
Recharge	Confirms successful posting of a payment to a prepaid account				
Reconnect	Notifies customers when service has been reconnected				

Table 3: Common Alerts and Notifications Generated by Prepaid Programs

An effective prepaid account management system is able to send such communication via outbound calls, text messages and/or email, depending on each customer's preferences. Each alert or notification is generated and sent automatically, but customers should have some ability to control the types of alerts they receive and the delivery method.

For example, consider the *Low Balance* alert. The utility service provider might establish a default threshold account balance of \$15 that triggers a *Low Balance* alert, but customers should have the option of establishing a higher threshold balance. The customer might opt to receive a *Low Balance* alert when the balance falls to \$20 or \$25, thereby securing more time to deposit additional funds. However, if that higher threshold results in daily *Low Balance* alerts, the utility may encourage the customer to lower the threshold in order to avoid the expense of sending out the *Low Balance* alert so frequently.

Communication Delivery Methods

Alerts contain important account information that often requires a rapid response. For example, when a *Low Balance* alert is sent, the customer must respond by depositing funds into the prepaid account before the funds are depleted, usually within a few days. Given the short timeframes involved, alerts must be sent through the preferred communication channels selected by customers. Specifically, customers should be allowed to choose to receive alerts via one or more of the following channels:

- An automated outbound call sent via the IVR system
- An email
- An SMS text message

In addition, utility service providers should have the ability to send push notifications through mobile apps and have an alert appear at the top of the screen when the customer logs into the web portal.

Customers' communication preferences should be identified when the prepaid account is created, with options to input multiple telephone numbers and email addresses as back-up communication channels in cases where the first method fails. Customers should also be allowed to update their communication preferences within the web portal or by speaking with a customer service representative.

Alert Delivery Status

The prepaid account management system should be configured to monitor the status of all alerts, whether sent via the IVR, a text message and/or an email. If an alert cannot be delivered, the system should record the error. In addition, the system should generate reports of all alerts sent and those that were not delivered, so that the utility service provider can work with customers to update their contact information for the receipt of future alerts.

Preferred Communication Channels & Frequencies

Exceleron Software's MyUsage platform has been managing prepaid account systems for more than seven years, and currently manages more than 70,000 prepaid accounts for its utility clients. A recent analysis of communication generated by MyUsage over the past 12 months shows that the average customer receives 36 pieces of communication per month, representing a combination of notifications (such as Daily Balance and Daily Usage) and alerts (such a High Usage and Pending Disconnect). This number may seem high, but is primarily driven by customers who opt to receive the Daily Balance notification (30-31 per month).

The data regarding the relative popularity of preferred channels and types of alerts reflect the preferences of this collective customer base, and thus the demographic makeup of the 70,000 customer accounts. Exceleron's analysis shows that, over the past year, 44% of the notifications and alerts generated by MyUsage for prepaid accounts were sent via email, while 41% were sent via IVR telephone calls, and 15% were sent via text messaging, as shown below in Figure 1. This is significant because emails generally are a no-cost delivery method compared to IVR telephone calls and text messages that carry a unit cost.

Figure 1: Percentage of Notifications and Alerts Sent via Email, Telephone IVR, And SMS Text Messaging via the MyUsage Platform From June 2012 To May 2013



The Costs of Communication

When implementing a prepaid program, software installation, integration, and the web platform are generally fixed costs. Variable costs are assessed for each prepaid account as the program grows. Communication costs are generally billed per unit and therefore are more difficult to anticipate, because utility service providers cannot know how often customers will access inbound customer services or require alerts. However, it is possible to use data from existing prepaid programs to make generalizations regarding the frequency of communication and the channels through which that communication occurs, allowing utility service providers to estimate monthly communication costs.

As stated in the previous section, alerts can be sent via email, an IVR telephone call, and/or an SMS text message. In Exceleron's MyUsage prepaid account management system, there is no charge for emails, but the utility incurs a small charge for each IVR telephone call and SMS text message. Average communication costs for utilities using MyUsage are \$0.65 per month per prepaid account. However, this amount varies widely depending on utility business rules for the prepaid program and customer preferences for alert delivery methods.

Opportunities to Lower Communication Costs

Through careful management, utility service providers can decrease the communication costs of their prepaid programs. Specifically, they can lower the communication costs by better educating customers,

restricting the communication channels for alerts, restricting the types of alerts that are sent to customers, and leveraging the utility's own communication infrastructure.

Lowering Costs through Customer Education

Experience has shown that the frequency of communication with prepaid customers decreases over time as they become more familiar with the prepaid program. During the first few days and weeks, customers may call with questions and concerns, but as they become comfortable with the web portal and alerts, they need little or no assistance. Similarly, new prepaid customers often request to receive all alert types. As accountholders become familiar with the program and gain confidence, they deselect certain alerts in order to reduce the frequency of communication. For example, as described above, if customers set their *Low Balance* threshold at a relatively high value, they will receive frequent *Low Balance* alerts. After a few days, customers generally lower the threshold so that they can avoid receiving superfluous alerts. If these alerts are sent via IVR or text messaging, this reduction results in cost savings for the utility service provider.

Customer education is the key to helping new prepaid accountholders select an appropriate threshold for alerts. Careful training of customer service representatives can facilitate the process for creating new prepaid accounts and empowering customers to select appropriate alert thresholds.

Lowering Costs by Restricting the Communication Channels for Alerts

As stated above, utilities do not incur an additional cost for each alert sent via email, but there is a unit charge for each IVR telephone call and SMS text message. Therefore, utilities can decrease the communication costs of their prepaid program by restricting the communication channels for alerts. For example, some utility service providers have chosen to deactivate two-way text messaging so that they are not charged for SMS inquiries sent by customers.

Similarly, utilities can limit the type of communication channel available for each alert. Figure 2 below illustrates the composition of alerts sent by Exceleron Software's MyUsage platform over the past year.



Figure 2: Composition of Notifications and Alerts Generated by the MyUsage Platform from June 2012 To May 2013

The chart shows that 24% of the alerts generated by MyUsage over the past year were Daily Balance alerts, and another 14% were Daily Usage alerts. If a utility chooses to not allow Daily Usage and Daily Balance alerts to be sent via text messages, it can avoid the cost of sending two alerts per prepaid customer per day. Customers could still opt to receive the daily alerts via email. This would significantly lower the average cost of communicating with prepaid customers who choose to receive those daily alerts.

Utility service providers, however, must be cautious in restricting the communication channels for alerts. The success of the prepaid program depends on providing adequate communication to customers so that they can make informed decisions about their consumption and payments. The provider of the prepaid account management system should discuss the advantages and disadvantages of permitting or restricting the various communication channels when the utility service provider is configuring the new prepaid program and training customer service representatives in its operation.

Lowering Costs by Leveraging the Utility's Communication Infrastructure

The utility service provider incurs a small fee for each call placed to or from the IVR. When the IVR solution is fully integrated with the prepaid account management system, calls are routed through the software provider. In most cases, these costs can be reduced significantly if the utility chooses to use its own IVR and other components of its communication infrastructure. This generally allows the calls to be placed locally, reducing long-distance expenses. When the utility uses its own IVR, calls placed to support the prepaid program do not represent any additional expense, making the prepaid solution more cost-effective.

Impacts on Call Centers

Many utility service providers are concerned about the impact of launching a prepaid program on their call centers. Will customer service representatives have adequate time to inform customers about prepaid service and walk them through the sign up process? Will they have enough resources to answer customers' questions?

The experience of utilities using Exceleron Software's MyUsage platform has shown that the first few weeks and months launching a prepaid program are marked by heavy demand on customer service representatives to explain the nature of prepaid accounts, guide customers through the account creation process, orient customers to the web portal, and answer questions as accountholders become accustomed to the prepaid program. Virtually all utilities have reported, however, that this demand quickly tapers off as accountholders become familiar with the prepaid program. In fact, within five or six months, the demands placed on customer service representatives typically decrease to levels below those seen before the prepaid program was launched.

In a traditional monthly billing environment, utilities spend significant time dealing with delinquent accounts. With traditional billing, customer service representatives frequently interact with irate customers, explaining why service has been disconnected, requesting higher deposits, and negotiating payment plans. In contrast, once customers sign up for prepaid accounts, the need for these uncomfortable conversations disappears.

At the beginning of a prepaid program, customer service representatives spend time explaining how the prepaid program works. Yet once the customer has access to information about his or her energy consumption and account balance, interactions with customer service representatives become minimal, reducing demands on the customer service department. In addition, the amount of time needed to

orient customers to the prepaid model and teach them to navigate the web portal quickly decreases as the utility learns what guidance works best and trains customer service representatives to follow appropriate scripts in their conversations with customers.

Oklahoma Electric Cooperative (OEC) launched its prepaid program in 2006. Today, nearly 6,100 of its residential meters (13% of its 47,000 customers) are served through prepaid accounts. In 2010, OEC estimated that it was employing three fewer customer service representatives (falling from 13 to 10, so a roughly 25% decrease in staff) and one fewer meter technician (falling from 4 to 3) than it had prior to launching prepaid service, and realizing about \$225,000 in cost savings (including overhead).³

Conclusion & Areas for Further Inquiry

Effective prepaid programs must make frequently updated account and usage information accessible to customers via inbound services at any time, and simultaneously provide outbound alerts and notifications that meet certain baseline requirements (to promote safety and a positive customer experience) in accordance with the preferences dictated by the customer. While this increase in communication comes at a cost, there are ways to manage and lower costs as noted above.

Strong customer education upon enrollment in prepaid service can have several positive impacts for both the customer and the service provider. Careful training of customer service representatives can facilitate the process of creating new prepaid accounts and also empower customers to feel confident with their new service and in the selection of channels and alert thresholds. Being well informed can avoid excessive or unnecessary alerts and "over communication" between the provider and customer.

Furthermore, service providers may consider limiting the communication channels for certain types of alerts or driving customers to channels that best leverage the utility's communication infrastructure. However, service providers must be mindful of the need to provide customers with adequate information and channel options to ensure safety and deliver a positive customer experience. In addition, the demographic makeup of the customer base can play a significant role in the design of a communications strategy. For instance, with young adult customers, there is a strong likelihood that text and mobile app communication will be preferred over email and IVR.

While new costs are incurred (e.g., increased communications, software installation and maintenance) to support prepaid service, the utility also experiences benefits and avoided costs (e.g., no paper bills, no truck rolls for disconnect / reconnect, avoided write-offs, improved customer satisfaction). The anticipated costs and benefits of a prepaid communications strategy are only one piece of the broader prepaid service business plan. Thus, all the elements of the business case (*see* Table 1, at p. 2) must be considered collectively from a cost-benefit perspective.

As the Prepay Energy Working Group moves into 2014, there will be a continued focus on critical updates and "on-the-ground" lessons learned from prepaid pilots and programs. Moreover, the DEFG team plans to work with the members to sketch out the nuts and bolts of a prepaid pilot, including a business plan framework, marketing and enrollment strategies. The end deliverable will be a guidebook created through interactive workshop sessions.

³ Source: "The Financial Benefits of Prepaid Programs: A White Paper for the Prepaid Account Management System (PAMS)" by Exceleron Software, September 21, 2010.

About DEFG and the Prepay Energy Working Group

Distributed Energy Financial Group LLC (DEFG), a specialized consulting firm focused on energy consumers, manages the Prepay Energy Working Group. Currently in its fourth year, the Prepay Energy Working Group sponsors in-depth research exploring the challenges and opportunities presented by prepaid energy offerings in North America. To ensure a broad spectrum of perspectives and experiences, working group members include utilities, energy retailers, regulators, consumer advocates, and metering and software solution vendors.

Cindy O'Dwyer, a Vice President with DEFG, leads the Prepay Energy Working Group. Cindy can be reached at: <u>codwyer@defgllc.com</u>.

About Exceleron Software

Exceleron Software, LLC is the leading software developer in the prepay industry. The company's patented MyUsage prepaid account management system is a cost-effective solution that allows utility service providers to launch and manage prepaid accounts for customers. Utilities across the United States are using MyUsage to lower costs, empower customers, improve customer service, and encourage conservation.

To learn more about MyUsage and how prepay programs are superior to traditional billing systems, please call (972) 852-2711 or visit <u>www.exceleron.com</u>.

APPENDIX: Exceleron Software's MyUsage Prepaid Account Management System: Screenshots of the Web Portal and Mobile App



Screenshot 1: MyUsage.com login interface

Screenshot 2: Account summary in a multiservice environment as displayed on MyUsage.com

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Screenshot 3: Account summary for a customer as displayed on MyUsage.com

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Screenshot 4: Detailed electricity consumption history for a customer as displayed on MyUsage.com

Screenshot 5: Detailed account information for a customer as displayed on the MyUsage mobile app.



Screenshot 6: Graphical representation of energy consumption and temperature for a customer as displayed on the MyUsage Facebook app.

