

## **AFTER THE DUST SETTLES**

*Automated Customer Communications:  
Helping Utilities Manage in a Changing Environment*

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## EXECUTIVE SUMMARY

With an aging infrastructure and workforce, increasingly restrictive regulatory environments, threats of terrorism, natural disasters and other issues, utilities face mounting challenges across a broad range of their operations. In addition, many utility customers are no longer just “rate-payers” – this change has made operational management more complex and customer management more of a challenge.

As part of their response to this changing environment, across the United States, utilities are adding automated customer communications solutions to their mix. These solutions offer a low-cost new way to communicate with customers while delivering results and lift in three major operational areas:

- Demand Response notifications
- Outage notificationss
- Credit and Collections – Revenue Protection

In addition, automated customer communications solutions can communicate with customers in an ad hoc fashion, such as when a utility may need to inform a group of customers about a billing error.

This white paper reviews how utilities in the US have begun working with these solutions to solve a range of operational challenges. We discuss additional operational data based on actual cases from utilities such as OG&E, Alliant, SoCalEd, Vectren, PSE and others.

Finally, we offer conclusions and recommendations that suggest how to best take advantage of these solutions in the areas of Demand Response, Outage Notification, and Credit and Collections.

## COAL DUST AND CURTAILMENT

### Automated Communications Help Utilities Shed Load

By January, Oklahoma Gas and Electric Co. (OG&E), a major investor-owned utility headquartered in Oklahoma City, had not had a forced generation outage—and thus the need for curtailing normal usage—in over 40 months. Normal peak load for OG&E in the winter months is about 3,200 MW and the company had 6,400 MW of total generating capacity, including its own power plants and other capacity under contract. In this region, winter is typically a good time to perform routine maintenance. OG&E operations took 1,500 MW off-line. That left 4,900 MW available, more than enough for normal winter demand. But events were far from normal.

On 7:15 a.m., Jan. 21, Phil Bartholomew, manager of OG&E's curtailment program, got a phone call while driving into work. OG&E Operations had a major problem. The extremely dry winter weather had allowed coal dust and other contaminants to be stirred up by winds. The contaminants had infiltrated major transmission facilities at OG&E plants, causing them to trip off. With 1,500 MW already offline for maintenance, this was a major problem.

The dust contamination problem was statewide – the situation was getting critical. Operations needed Bartholomew to notify over 500 individuals at over 100 large commercial and industrial customers involved in OG&E's voluntary load curtailment program and begin shedding load as rapidly as possible.

Bartholomew promised to do what he could and said he would call right back. Still 20 minutes out of the office, he called the administrator of OG&E's notification programs to review the situation. The administrator said that she would put their curtailment program into effect immediately, using their automated communications solution.

"By 9:00, Operations was seeing the curtailment effects," Bartholomew says. "We dropped 154 MW of load. Just about everyone who was on the program complied and it was enough to get us through. We had no outages."

Before the emergency was over, OG&E had lost another 1,500 MW of generating capacity to the dust storms. But the automated load curtailment notification program, which began within 45 minutes of the call to Bartholomew by Operations, enabled OG&E to avoid an even bigger problem.

What made this quick reaction possible was OG&E's automated notification system. Their system, a product of Varolii Corporation (formerly PAR3 Communications and EnvoyWorldWide), can deliver an unlimited number of personalized, interactive

notifications with a few mouse clicks. Notifications are delivered using the recipient's choice of channels. For example, some recipients prefer to be notified by e-mail, others want to be called by phone, some may even choose to receive a text message – or even a combination of any of these methods. Delivery is complemented by the ability to deliver the communication using the recipient's preferred channel or channels, improving response rates.

“When demand for electricity is about to exceed supply due to weather conditions, power plant problems, or transmission line overloads and curtailment is necessary, it's imperative we communicate with our customers in a fast and reliable manner,” says Chuck Miller, systems administrator at Alliant Energy, another Varolii customer. “Varolii helps us reach our customers instantly using the device they prefer, and can even be customized based on the event and time of day.”

## Evolution in Action – The Changing Nature of the Utilities Marketplace Drives Search for Efficiencies

The utilities industry has undergone a sea change since some 20 or 30 years ago when electricity was nice to have, but was furnished by the government, or semi-government organizations that operated like they were part of the government.

In those days, customers were “rate-payers” and their options were essentially non-existent. When the lights went off, their option was to wait until whenever the electric company got around the “fixing” the problem. In short, there was little need for consumer focus. Today, matters have changed – significantly. Changes have involved every facet of the business, from the regulatory to the consumer, to cost of fuel and more. For example:

- Computers have become ubiquitous in homes and businesses. When the power goes out, critical work cannot be managed across all industries.
- In-home medical devices are far more prevalent. Operated by electricity, continuity of service to these devices can be literally a matter of life and death.
- The forces of deregulation have shaken utilities out of their sleepy, semi-government roles and forced them to operate as businesses with customers instead of rate-payers. Although deregulation stalled in many parts of the country, it did establish wholesale markets across the country, retail markets in some areas, and changed consumers expectations of service from their utility.

Changing market forces, plus skyrocketing fuel costs, threats from terrorism and hurricanes, changing regulation and other major upheavals place significant financial

pressure on utilities. These pressures require a much more efficient and proactive approach towards operations.

These changes and others have made it imperative for utilities to stay much more closely in contact with their customers and other stakeholders. And, population growth has created many more stakeholders with whom they must communicate, while straining capacity to keep the power on, much less call people and tell them when it will be “back on.”

In fact, utilities have had to seek out new operational efficiencies in every area in order to satisfy both increased demand for power and increased demand for responsive service. To meet operational and service challenges, utilities have turned to automation that can help bridge the gap between resource and demand. One of the areas where utilities have found automation can deliver substantial benefits is the area of customer communications. This is an area that impacts the two key areas we mentioned earlier – operational efficiencies, as when demand response and curtailment programs are managed, as well as quality of customer service, as when customers can receive prompt notifications of outages and status, or can easily schedule and receive confirmation for a service call.

## Using Automation to Complement Contact Center Operations

Virtually all utilities operate, or contract for call centers. Call centers are expensive to staff and maintain and “right-sizing” them always is difficult. They also have been affected by modern expectations of service level, which affects staffing and availability requirements. In short — using agents to contact customers is expensive.

Due to these constraints, in the past, most utilities typically never bothered to call a customer who was late with paying his bill to try to encourage payment. The utility sent a notice and, if the bill wasn’t paid on time, they turned the power off. Indeed, today, across many parts of the country, utilities are subject to seasonal moratoriums on disconnections. The threat of disconnect is unavailable – communication becomes far more critical.

Call centers are much busier, much more professional and represent the “face” of the utility to the rate paying public. But the cost of adding warm bodies to the call center to meet these increasing demands can be prohibitive, in most cases. That’s why many utilities, like OG&E, Alliant, SoCalEd and others, have turned to automated calling to communicate cost effectively with their customers.

Automated calling provides a number of advantages for utilities, as the previous example of OG&E’s Demand Response program demonstrates. In addition, an automated communications solution can complement and augment agent calling programs,

delivering notifications ranging from outage communications, to collections calls, regulatory-mandated communications and more.

One example of regulatory-mandated communications comes from California. In the late '90s and 2001-2002, people across California and much of the rest of the country became familiar with the state's three "Warning Stages" of an impending "brown-out" or "black-out." After the collapse of the California Public Utility Commission's deregulation scheme, large scale power shortages were inevitable.

Suddenly, California utilities needed to be able to reliably and rapidly communicate with large numbers of their customers about various outage conditions and outage status. Seeing the writing on the wall, and unable to effectively communicate with their millions of customers using call center agents and "blast" messages, Southern California Edison (SoCalEd) went through a selection process to find a partner to help them automate and cost-effectively manage their customer communications. Like Alliant and OG&E, they chose Varolii.

"Summer months are the worst," says Bill Edwards project manager for SoCalEd in charge of the Varolii relationship. With over 13 million people relying on SoCalEd for electricity, communications present a large-scale issue. In 2006, SoCalEd delivered over 266,000 calls to its customers through their Varolii solution, including about 3,000 routine notifications per month, plus those for demand curtailment.

"We usually average about 85,000MW per month," Edwards says. "In some years we do an awful lot more per month. When all the air conditioners come on, power usage peaks higher and starts to match up with the state forecast, usually about 48,000 MW overall. When we start getting up around 46,000 or 46,000 in usage, people start getting very nervous.

After several days of high temperatures, the ground holds the heat and every day gets hotter. While that's going on we may have some (generation) resources go off line, and we may have some transmission circuit issues (overheating). When this happens, we need to send out messages and inform customers that we may have to reduce their load."

"We have pre-identified those customers who agree to curtailments and, depending on the program we want to execute, have sent dedicated phone numbers, as well as alternate (courtesy) phone numbers to our solutions partner. After that, the notifications just go out.

For one event, we may get a Stage 1 alert – a warning. A Stage 2 alert means customers on our programs need to come off-line immediately. Last year we had two or three events where we actually cut a couple of circuits."

Edwards says that one critical advantage of the automated solution is speed. When an event occurs, the first messages are delivered within five minutes of the implementation order. “We push a button, our Varolii system collects the data and the communications go out the door. It’s pretty darn quick,” he adds. And, all of it takes place without the need for additional call center personnel, reducing operational costs and enabling better management of staff resources.

## MORE COLLECTIONS – FEWER DISCONNECTIONS

### The Role of Automated Communications in Revenue Protection

**Puget Sound Energy (PSE)**, Seattle, WA, has been using an automated communications solution to complement and augment its collections operation since 2000, according to Tom Shannon, director of Revenue Management. “When we started, we had our own process in place with four people whose job it was to try to get in touch with as many delinquent customers per day as they could,” Shannon says. “Our automated customer communications partner enabled us to up redeploy those four FTEs (full-time equivalents) and we’ve been running the application every since.”

Shannon noted that strong return on investment was one factor in their choice of partners. “We probably had our ROI (return on investment) in two months. When you’re looking at pennies per completed automated call vs. four FTEs, making the ROI wasn’t hard to do.”

PSE uses Varolii Corporation’s Interact platform to make between 1,300 to 1,500 collections calls per day. In 2002, PSE added the ability to make credit card payments directly within the collections call. Over the past five years, the utility’s bad debt has declined from \$12 million to about \$8 million. Shannon credits “a lot of hard work” in several areas for this substantial improvement, but says that a large part of this reduction is a result of the automated calling system. As a side benefit, PSE also uses Varolii for curtailment notifications.

**Vectren Energy**, Evansville, Ind., was faced with an extensive bad-debt and customer late payment problem plus an October-to-March moratorium on turn-offs. The 1.1-million natural gas utility turned to Varolii for help in late 2004. “We started the relationship with a pilot for outbound collections calls,” says Mike Burnor, supervisor, Credity and Risk. “We did a lot of metrics on the pilot program, which we continue to do monthly. Varolii now is our sole provider for collection account activity.”

“We needed to cut costs (around the collections activity) and beef up effectiveness,” Burnor goes on. “Before Varolii, we were penetrating about 25-to-30 percent of our delinquent portfolio per month. With Varolii, we’re reaching 300% (or more than three

connections per month). And, we experienced a substantial decrease in costs. Along with higher penetration, we gain additional efficiencies around immediate payments and promises of payment.”

Varolii also has helped Vectren with what Burnor calls “one-off” situations. In one, a batch of bills were calculated incorrectly. “We set up a file of customers to call about the incorrect bill and within a moment’s notice, the calls were going out,” he says. “Getting that done didn’t require a six- to eight-week lead time.”

The ability to do something that simply could not be done in a cost-effective fashion before – namely contact large numbers of customers personally, professionally and interactively, offers utilities clear advantages in list penetration, intensity, and in such key areas as dollars collected vs. dollars spent to collect.

## Automated Communications Best Practices

Although utilities can obtain dramatic results by using automated communications solutions, as shown earlier in this white paper; like anything else, generating the best results – using a solution most productively, requires not only selecting the right solution, but applying best practices to the effort. In this case, the best practices must focus on getting customers to hear your message, and, ultimately, respond, whether you’re communicating about a service event, a curtailment event or an attempt to collect a debt.

The more customers you can connect with, the more customers who actually listen to your message, the better your curtailment program will run, the more dollars your collections group will collect.

The first step in making notifications effective is to include enough personalized information to make the content relevant, important, urgent, and useful to the recipient. The key reason these communications work is that they are personalized – not “blast” messages with the identical information for perhaps tens of thousands of recipients.

The utility should be able to use their solution to easily personalize communications, targeting each recipient with specific information that drives higher response rates.

These personalized communications should also enable the customer to interact – to respond directly within the communication. For example, a collections-specific communication may offer the customer the ability to pay, or promise to pay, directly within the application, without the expense and complexity of managing payments through a service agent or IVR. Or, the customer should be able to authenticate directly within the application, confirming their identity in accord with the organization’s business rules.

When a customer receives a scheduling communication about a service call, they should be able to interact with that communication as well, informing the organization directly whether or not they are available during the specified window, or transferring directly to an agent to set up a different time.

The other side of personalization is customization. Customization adds business rules and other information to the communication. Customization features enable the organization to tailor virtually every element of a campaign or program, including customer-preferred notification channels and message content, response options, retrieval features, delivery logic such as retry attempts, retry intervals and expiration rules, dispatch rate, Computer Telephony Integration (CTI) features, data extraction rules, and systems update processes.

Ultimately, behind both personalization and customization, it's important to enable choice. Choice is a driver for both personalization and customization. A demonstrated way to increase customer satisfaction and contact rates is to enable customers to self-select how, when, and across what channel the utility communicates with them. The utility should be able use customers stated communications preferences in order to determine what channel or channels (e.g. voice, text message, e-mail, fax or any combination of these channels) to use.

Again, enabling choice is not simply a nice thing to do for the consumer. It's proven to drive significantly higher response rates. One key feature is the capability to include "follow-me" rules. For example, a customer may choose to initially receive a voice message, followed by an e-mail (if, say, the voice message does not receive a response).

Features like these continue to up the ante on response rates, driving higher numbers of responses, while enabling customers to feel more in control of the communication — in short, providing a better customer experience that leads to more productive communications and better results. Other key features and benefits include:

**Reporting Capabilities.** Effective, timely reporting is key to any ongoing operation. It's critical to be certain that detailed reports are available in near-real time, as well as making summary reports available for management reporting and tuning. Ideally, the organization should be able to access reports through a Web interface for ease of use, security, and connectivity. A consistent, rich set of timely reports enables insight into user response behaviors. Analyzing the data in the reports enables more effective campaigns.

**Data analysis capabilities.** Building on reporting is the data analysis that should accompany it. Be sure that you can collaborate with your vendor, using the information to conduct ongoing champion-challenger testing that offers real improvement. Even the best enterprise solutions rarely deliver peak performance right out of the gate. Partnering with

your customer communications vendor to perform ongoing, data-driven tuning, offers substantial advantages.

Experience of vendor. Utilities have a many industry-specific issues that must be taken into account when communicating with their customer base. These issues include unique regulatory issues, privacy considerations (particularly with billing) as well as requirements for following internal procedures, and other issues simply typical of the utilities business. A vendor with significant utilities experience can provide a solution that matches up automatically with most requirements, as well as “speaking your language”, enabling the vendor to more easily work with critical operational groups within the organization.

## LOOKING FORWARD TO STAY ABREAST OF THE TIMES

As utilities continue to face a myriad of challenges including aging infrastructure, aging workforces, restricted revenue, regulatory uncertainty, terrorism, natural disasters, etc., automation is stepping in to improve efficiencies, reduce costs and enable new ways of doing business. Utilities are beginning to make more and more effective use of relevant automation solutions to improve operational efficiencies, collect more money from their rate-payers, and deliver a good customer experience.

Automating outbound calling is a logical next step in this on-going challenge – the challenge of staying abreast of an ever changing environment and continuing to find new operational efficiencies.

The vendor mentioned as the vendor of choice throughout this paper is Varolii (formerly PAR3 and EnvoyWorldWide). Varolii delivers analytics-driven customer communications solutions that redefine the way organizations communicate with their customers. Varolii solutions offer provable ROI, drive consistently high response rates and improve the customer experience. Varolii partners with clients to transform customer communications in marketing, business continuity, collections, curtailment, and demand response.