

A Comparison of Two Utility Approaches to Promote Water Heating Energy Efficiency

By Katherine Johnson

Water heating is usually the second biggest energy expense for a homeowner. However, the water heater is often the “forgotten appliance” for many utilities. This article summarizes the approach taken by two utilities—Portland General Electric and Georgia Power-- to promote energy efficient water heating through early replacement programs.

“PGE had not talked about water heaters in 10 years or about energy efficiency and lowering the total cost of providing hot water for the family. We had not talked about the importance of turning down the water heater 10 degrees. We did not have a purchasing guide for our customers. This is an electric appliance that is the second biggest end-use in the household and we hadn’t said anything about it...so we needed to educate our customers,” explained Roch Naleway, Energy Efficiency Marketing Specialist at PGE.

To address this need, Naleway worked with Rheem/Marathon Water Heaters and Roto-Rooter Plumbing in Portland, Oregon. Together, they developed a limited offer for PGE customers in which customers could receive a 50-gallon electric water heater installed by Roto-Rooter for a special net price of \$765.00. The Energy Trust of Oregon, which administers Oregon’s investor-owned utility energy efficiency programs, also played an integral role in the development of a rebate and program promotion.

Water heaters have also become an important element in Georgia Power’s overall positioning in the energy market. Georgia Power began promoting energy efficient electric water heaters as part of its broader strategy to promote an energy efficient alternative to tankless water heaters and as a way to offer customers a more cost-effective choice compared to natural gas water heaters.

Georgia Power serves 2.25 million customers throughout Georgia, and is the largest of four electric utilities that make up Southern Company.

“Georgia Power was losing water heater market share and to combat that they needed to find an efficient and trouble free water heater. Marathon has been working with Georgia Power for more than 10 years to get them interested in starting a water heater program. With all the attention given to tankless heaters, Georgia Power saw the role Marathon could play in reclaiming that market,” explained Bob Muller, Eastern Sales Representative for Marathon/Rheem Water Heaters.”

Scott Mills, Georgia Power Product Manager, added that despite deregulation of the natural gas market in 1999, customers still had to pay the service connection fee to the natural gas companies. As a response, Georgia Power started a program that encouraged conversions from natural gas to electric water heaters, as a way to help both the utility and its customers.

“Water heating is good load for the utility,” Mills said, “and through gas conversions the customers could save money. So promoting electric water heaters was in the best interest of both the utility and the customer.”

Design Strategy

The goal of both programs was to educate customers about the importance of selecting an energy efficient water heater before they actually needed to replace it. As Naleway explains, “Usually this is an emergency replacement ‘panic’ purchase and there is little time for decision-making, so we wanted our customers to make a different choice, not just a price shopping decision.”

He added that most customers are not familiar with making this type of purchase. “This is a peculiar market because customers don’t know about warranty issues or energy. Because this is an infrequent purchase, they don’t know what to look for. There are a wide range of water heater products and retail prices that can exceed \$850 installed.”

The promotional philosophy was to provide “preventative medicine” and make this purchase much easier and transparent for PGE customers. “We wanted to minimize the hurdles for customers,” Naleway said.

Naleway also conducted some market research about water heater purchases in his service territory and realized that there were several challenges associated with trying to educate residential customers.

“We spoke with a plumber and learned that about 50% of water heater installations were self-installed and purchased at hardware/home centers like Home Depot. So we realized we only had one shot at the customer every 6-to-10 years or so. Most water heaters are sold as commodities and if we don’t specify what to look for, the customers go for cheapest option. But that is not necessary the best one,” Naleway said.

Energy and Non-Energy Benefits

Another strategy used by both utilities was to promote both the energy and non-energy (green) benefits of using an energy efficient technology. This approach was especially successful for Georgia Power. The utility developed a memorable advertising campaign promoting the long life of these waters.

Marathon also has “green” benefits because it conserves landfill space. Nearly 10 million water heaters are produced, transported and installed annually in North America to replace failed units. Georgia Power included the “green” benefits of Marathon water heaters in its economic modeling for the program. Assuming a 9-year gas water heater life and a 36-year life on Marathon, the landfill space avoided per Marathon Water Heater is 28.8 cubic feet which is equivalent to 50 full dump truck loads of heaters saved from the landfill for every 1,000 Marathon water heaters that are installed.

The durability of the Marathon water heaters was another selling point to the multi-family property managers, Mills added. “The multi-family manager loves Marathons because there are no worries about maintenance and service and they want to avoid service calls and damage that occurs from leaking heaters.”

Implementation Tactics

PGE’s four-month program was launched on January 1, 2008 and ran through the end of April.

Georgia Power had a pilot program with employees in 2006. In 2007, the program was rolled out externally to its residential customers. The ultimate goal was to provide a

**NOTHING LASTS FOREVER.
EXCEPT A MARATHON.**

Get a \$525 rebate when you replace your existing gas water heater with an all-electric Marathon® water heater.*

- Every Marathon water heater comes with a manufacturer's lifetime tank warranty. A Marathon will last a lifetime in your home — not in a landfill.
- A Marathon water heater is one of the most energy-efficient water heaters on the market today. Thick Envirofoam® insulation maintains a consistent hot water temperature.
- A Marathon is tough on the outside with an inner tank that won't rust, corrode or leak — ever!

Call 1-800-524-2421, ext. 975 now for rebate details and installer recommendations.

*Certain restrictions apply. 2008 rebate ends December 31, 2008. Must be a Georgia Power customer.

we're **ON** so you can be.®

GEORGIA POWER
A SOUTHEAST COMPANY

broader distribution of water heaters and to expand the program to all customer segments. In 2008, the program was expanded to commercial customers.

“Georgia Power also provided the forms electronically on their website, so local plumbers and contractors could download all the forms they needed and provide customers with a Marathon wherever they were.” Muller added.

The website also provided customers with helpful information about Georgia Power’s Marathon program; including a statewide map of recommended installers, an interactive Marathon water heater graphic illustrating all the benefits of the product, numerous forms and fact sheets, and satisfied customer testimonials. Visit georgiapower.com/marathon

Incentive Levels

PGE worked with Energy Trust of Oregon to establish an incentive level based on its cost-benefit analysis. Based on the analysis, Energy Trust of Oregon was able to offer PGE customers a \$75 dollar incentive. This incentive, combined with the \$100 instant rebate from Roto-Rooter, helped to reduce the installed cost to \$765. The following box summarizes the incentive levels used in this program.

Figure 1: Incentive Levels for PGE’s Electric Water Heater Program

<p>\$940 Marathon 50-gallon electric water heater with standard installation by Roto-Rooter -\$100 Instant rebate from Roto-Rooter -\$75 Cash-back incentive from Energy Trust of Oregon \$765** special price for a lifetime, super-efficient, rust-proof Marathon electric water heater – including installation! This is an incredible value compared to what you could expect to pay for a basic, short-life, steel-tank water heater</p>

Georgia Power offers customers a \$525.00 rebate to switch from an existing natural gas water heater to a Marathon water heater. However, the actual costs for this conversion may be higher depending on the extent of the electrical wiring required.

Program Ally Roles

Both programs were successful because they relied on strong partnerships established within their communities that included the contractor base, distributors, wholesalers, and other key program allies.

PGE built a strong relationship between the utility, Energy Trust of Oregon, Marathon, Roto-Rooter, and an electric utility focused wholesaler, General Pacific, who supplied the Marathon water heaters.

Role of Roto-Rooter

Roto-Rooter, a nationwide plumbing firm, was integral to the overall success for both utility programs. Marathon had established contacts at the national level with Roto-

Rooter that were invaluable as Naleway started to set up this program. The local franchise owner was willing to negotiate a “flat rate” installation fee that would cover about 95% of the water heater installation jobs. This allowed the program to be marketed consistently to all PGE customers.

“We asked Roto-Rooter to be a partner because we needed to find someone who could handle the whole service territory,” Naleway said. “It was difficult to find plumbers who were willing to participate. So we worked with a local franchise of Roto-Rooter who understood the market. It is difficult to coordinate with a lot of different plumbers.

Georgia Power also worked with local plumbers and the local Roto-Rooter franchise as well. As Mills explained, “Roto-Rooter was big enough to handle the metro Atlanta area and it committed to a standard installation cost for the customer.”

Roto-Rooter also made sure that the plumbers were qualified and even hired an electrician to help install the wiring for the conversion, making the installation even easier and more cost-effective. Georgia Power’s installation network now includes more than 20 qualified plumbers across the state.

Role of Energy Trust of Oregon

Energy Trust of Oregon, which administers energy efficiency programs on behalf of Oregon investor-owned utilities, also played a key role in the overall success of PGE’s program. Energy Trust staff provided analysis support that allowed them to provide an incentive to further lower the cost of these water heaters.

“We had a big planning session with them and they came back with a \$75 incentive for the program,” Naleway said.

As a way to remain “vendor neutral,” Diane Ferington, Senior Residential Manager for Energy Trust of Oregon, added that the \$75.00 rebate is available for any customer who purchases a water heater with a 20 year measure life that has the same efficiency level as the Marathon product.

PGE’s success with this promotion also increased contractor interest and spurred several others in Oregon to develop their own water heater programs. “Energy Trust set up a special *promotions* page on its website as a way to allow other contractors to launch their own promotional offers across a variety of energy efficiency measures. We required these offers to provide an additional value to the customer beyond Energy Trust incentives,” Ferington added.

She said this program provided an opportunity for their organization to reconsider the importance of promoting both electric and gas water heaters. As a result of PGE’s promotion, Energy Trust modified their program requirements to allow point-of-purchase incentives at retail and wholesale locations as way to reach out to those customers who prefer to “self-install” water heaters.

Role of GRESCO

Georgia Power had the additional challenge of trying to serve both metropolitan areas, like Atlanta, as well as more rural areas in the state. The utility was able to develop a successful contractor program by developing relationships with both a plumbing franchise as well as a wholesaler who served the rural markets.

The Marathon team tapped into its distribution network owned by electric utility cooperatives. “We worked with the distributor that serves the electric rural cooperatives throughout the southeast. “All in all, it was a good deal for volume and saved money in distribution costs,” Mills added.

This two-pronged approach also broadened the contractor network, Muller said. “Working with GRESCO also helped reach contractors in areas beyond urban Atlanta.”

Program Results

PGE

During the four-month period, more than 300 Marathon Water Heaters were installed in PGE customer homes. Since this was a new promotion, there was no way to gauge success.

“We thought 100 installations would be great so we exceeded our expectations, and we will be doing it again next year,” Naleway said.

This program was so successful because PGE had integrated it into their overall energy efficiency strategy and included it as part of its 12 month plan. The utility had set aside funds to promote energy efficiency during the “winter heating season” and that promotion, combined with the tax incentives and rebates, contributed to the program’s success.

Moreover, market has started to transform. Since the program, inventory levels of Marathon Water Heaters have increased among non-participating contractors directly as a result of this program.

A program like this should lead to increased inventory levels of more efficient electric water heaters throughout the Portland area. Ferington said, “Having this promotion was good for all types of energy efficient water heaters. We have seen an increase in the stocking levels of energy efficient water heaters in this area.”

Georgia Power

This program was fairly successful in its first year. More than 1,400 Marathon water heaters were installed in Georgia Power’s service territory. The program was

unexpectedly successful in the multi-family housing market, which accounted for approximately half of its installations. This market has been successful, so Georgia Power is continuing to reach out to multi-family owners and managers in its service territory

Lessons Learned

Through these programs, both utilities learned the importance of collaborating with key trade allies. Both utilities worked with their partners to create an easily understandable program that communicated effectively to the customers. This was enhanced through a strong relationship among Roto-Rooter, wholesalers, and other key allies such as the Energy Trust of Oregon. These utilities also learned the following key lessons that could be applied to other utilities considering an effective strategy to promote energy efficient products, such as water heaters.

1. Look for new ways to bring the product to market.

When the traditional retail channels did not meet Georgia Power's needs, the Marathon team went a different route. By teaming up with a wholesaler specializing in the electric cooperative market, Marathon was able to guarantee product availability throughout Georgia Power's service territory while also minimizing costs. This also opened an entirely new distribution channel to Georgia Power for future programs. By looking beyond the "traditional channels," the Marathon team was able to develop a custom and cost-effective distribution solution.

2. Never stop marketing the program.

Even though Georgia Power had a successful first year, the utility is committed to refining and expanding the program marketing. As Mills observed, "We are always trying to do a better job of packaging the program."

3. Local knowledge needs to be combined with national knowledge.

Another key to this program's success was the ability for PGE to leverage Marathon's deep knowledge and expertise about water heaters as well as experience working with over 250 utilities nationally.

"PGE promoted the Marathon 800 number so customers could be directed to trained Customer Service Representatives (CSRs) at Marathon. These CSRs were also cross-trained on the PGE program, so they could answer general as well as technical questions," Richards said. "We also directed consumers to our website (www.marathonheaters.com) where they could view a 'factory tour' video showing how the Marathon is produced."

About the Author:

[Katherine Johnson](#) is President of Johnson Consulting Group. For more than 17 years, Katherine has worked closely with investor-owned, rural electric cooperatives, and municipal energy utilities. She has helped utilities design, implement, and evaluate successful programs that target the all sectors of the energy efficiency market. She has also worked closely with program administrators in designing and evaluating innovative energy efficiency programs such as on-the-bill financing programs promoting whole-house energy efficiency improvements.

Katherine is also active within the energy services industry, serving on the Board of the Association of Energy Services Professionals (AESP) and is a frequent presenter on a variety of topics including effective program design, evaluation, and implementation for Demand Side Management (DSM) programs, identifying industry “best practices” in design and evaluation, and making the “business case” for energy efficiency programs.

She earned a Masters in Business Administration from Rollins College with concentrations in Marketing and Finance, and an undergraduate degree in Business-Journalism from Indiana University.