

SmartGridCIS at Work in the Land Down Under

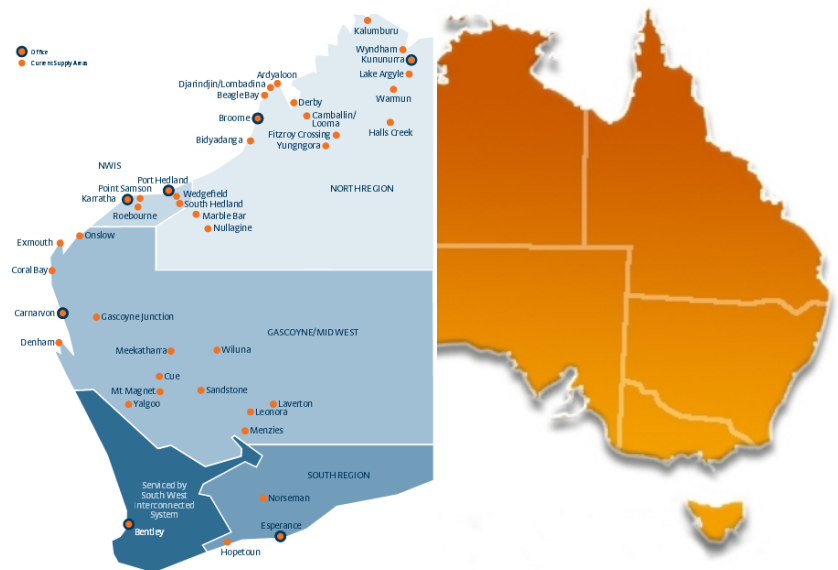
Horizon Power is a State Government-owned utility in Western Australia serving 48,000 customer connections including 10,000 businesses. By most standards in the U.S., Horizon Power would be a small utility, similar to a municipality or an electric membership cooperative. However, unlike any utility in the U.S., its service area covers 2.3 million square kilometers. By comparison, the largest service area stateside is Pacific Gas & Electric, which covers 181,000 square kilometers.



Along with Horizon Power’s vast territory comes a wide range of residents and customers, including remote Aboriginal communities. Since 2006, the utility had offered some of these isolated communities a prepaid energy program, giving customers access to electricity without going into debt. However, outdated technology and revised regulatory requirements created new challenges for the company and almost brought the program to a halt.

“First of all, the prepayment meter we had installed was no longer being manufactured,” said Brett Taylor, Horizon Power’s Project Manager, Prepayment Metering Project. “We also needed to respond to a revised regulatory code for residential customers, which meant significant changes to how we managed our prepayment program.”

Taylor explained that some of the requirements were quite onerous. For example, the utility had to display the customer’s account balance on or adjacent to the meter to an accuracy of within one dollar of the actual balance. They also had to be able to provide customers data on their total energy consumption plus their average daily consumption and costs for the previous two years.



Knowing how critical the prepaid program was to their customers, Horizon Power set out to address the challenges. The utility purchased new advanced meters which would allow the necessary data to be available and viewed by the customer on their meter at their home. The company also collaborated with Silver Spring Networks to deliver connectivity between the

meters and the back office. The next step was to find an equally suitable prepayment billing software partner.

To that end Horizon Power evaluated many options, and eventually turned to SmartGridCIS. “We were introduced to SmartGridCIS by Silver Spring Networks,” Taylor said. “They offered an out-of-the-box solution that met our needs and were already a partner of Silver Spring Networks.”

SmartGridCIS: Australian for Added Value

Because of the regulatory requirements, one of the key functionalities that SmartGridCIS needed to deliver was the ability to calculate a customer’s balance based on readings “requested” from the meter and to communicate those readings over the wireless network.

Today, SmartGridCIS is deployed alongside Horizon Power’s existing CIS and provides all the functionality needed to manage the prepayment customers’ accounts.

“With SmartGridCIS, we perform calculations in near real-time using half-hourly meter readings. Our prepaid customers know their balance just by looking at their meter, or they can receive a text message that alerts them to a low balance,” said Taylor. “We also leveraged the SmartGridCIS messaging functionality to provide other messaging which has proven to be popular with our customers”.

The ability to receive a text message that alerts them to a low balance is a new feature for Horizon Power’s prepay program. Before working with SmartGridCIS, customers had to purchase “power cards” in increments of \$10, \$20 or \$50. The customer would then swipe the card at their meter, and the balance would be displayed. While they could press a button at the meter to get a \$10 (repayable) emergency credit, there were “surprise” disconnections due to insufficient credit. In addition, the power cards could be damaged or lost; a big problem for customers.

“Working with SmartGridCIS allowed us to easily meet both regulatory requirements, and business needs,” said Taylor. “Now, instead of the power cards, our customers can walk into a local shop or service center and pay at the counter. An assistant takes the payment and updates the

Customer Messaging

Message from Horizon Power. The available credit on your Meter has reached \$10.00. Please add credit to prevent disconnection.

Message from Horizon Power. You have no available credit and will be disconnected. Please purchase credit to reconnect.

Message from Horizon Power: You have successfully added \$10.00 to your Meter and your balance is \$20.51.

Message from Horizon Power. Your Meter can be reconnected. Please press button 2 on the meter for 5 seconds to restore.

customer's account balance by accessing the SmartGridCIS web portal.”

Taylor also said that SmartGridCIS's data and reporting capabilities have given them unprecedented views into customer usage and behavioural information, which provides the opportunity to optimize the program for both customers and the utility.

Providing Energy for Life

Horizon Power began rolling out the new prepayment solution in mid-2014, starting with a pilot Aboriginal community of 45 houses. After this proved successful in late 2014, an additional 220 customers were moved on to the new solution. Horizon Power now intends to replace all older style prepayment meters with the solution by early 2016. The utilities vision “Providing Energy for Life” is reflective of the varied lifestyles represented in the service area. One of the main principles of the prepayment project is to ensure that customers are not disadvantaged by participating in the program.

“We have built-in safeguards and redundancies, so if there is a problem with a meter or with the communication network, a customer does not get disconnected erroneously,” explained Taylor. “With SmartGridCIS, we have control over the business rules and tariffs, and can change them if there is a need. We can even apply concessions and entitlements directly to a customer's individual account.”

About SmartGridCIS

SmartGridCIS is a leading provider of energy billing and CIS solutions for utilities and retail energy providers (REPs) that want to fully leverage a smart metering infrastructure. Since making the prepaid energy platform available commercially in 2009, SmartGridCIS has continued to build a steady and diverse customer base while continuously enhancing their product offerings. SmartGridCIS recently introduced GridLinkCIS, a single platform to support any metering technology, across multiple commodities, for both traditional postpaid and prepaid utility billing.