

# Smart Metering in Switzerland powered by Landis+Gyr

Landis+Gyr supplied its end-to-end Gridstream solution to Die Elektrizitätswerke des Kantons Zürich (EKZ), one of the first utilities to implement Smart Metering in Switzerland

Today implementation of Smart Metering in the residential sector in Switzerland generates in total 2 to 5% savings. When embarking on its first Smart Metering project, EKZ has outlined clear business objectives the utility was aiming to achieve. Landis+Gyr Gridstream solution has proved to be most plausible from the technical and financial standpoint, perfectly matching customer requirements.

Based on its experience of successful field installations in Europe, Landis+Gyr has customized its Gridstream solution to deliver distinct benefits to EKZ, including optimizing daily processes and increasing operational efficiency. The offering comprised 1000 smart metering points delivered with the fully integrated PLC based communication technology and supported by the front edge Gridstream MDUS (Meter Data Unification and Synchronization) software that enables unification and seamless integration of data in the customer SAP system.

To date, Swiss utilities have been mainly applying the ripple control protocols in most residential areas. Dynamics 3G® - a new technology from Landis+Gyr - supports existing ripple control and Smart Metering infrastructures, thus ensuring

higher flexibility and operational safety. The Hybrid Load Switch L740 is designed to be operated in existing ripple control systems and in the Gridstream AIM Smart Metering System at the same time in order to better manage energy supply and demand. Some of the core functionalities include remote parameterization and programming of customer profiles by broadcasting or by adressing an individual L740 device. A quick fault finding by the network operator due to the status reporting feature of the L740 will be quaranteed.

Added-value applications, such as personal energy management tools from Landis+Gyr, have underscored EKZ commitment to customer satisfaction. Now Swiss end users have got the opportunity to see their real time energy consumption and tariff data displayed on ecoMeter, an in home unit solution. EcoMeter and an informational password-protected Internet Smart portal maintained by EKZ equally contribute to raising awareness among end customers about sustainable energy use.

The pilot has been rolled out in one of the Zurich districts Dietikon in spring 2010. Integrated Gridstream solution has already delivered tangible performance results, thus leveraging the



advantages of the Smart Metering deployment. Meter reading and billing are now executed on a monthly basis. The on demand meter readings are conducted from the EKZ SAP system and take only 2 minutes, while regular readings are being carried out within only 3 seconds. Overall MDM (Meter Data Management) efficiency has increased by 80-99%. Daily updates of the 15- minute load profiles are similarly conducted directly from the customer SAP system.

The Gridstream solution from Landis+Gyr is scalable and can easily be extended to accommodate needs of the EKZ large customer base.



#### **Quick facts**

EKZ is one of the largest state-owned utilities in Switzerland, which accounts for ca. 10% of the overall country power supply. Nearly one million residents profit from the utility services in the canton of Zurich. The company is striving to improve its grid efficiency by delivering environmentally safe and sustainable energy solutions to the customers.

## **Gridstream solution description**

- 1000 E350 PLC-based metering devices
- Gridstream AIM Software
- Gridstream MDUS software
- Data concentrator DC200/DC450
- Hybrid Load Switch L740
- ecoMeter

#### Roadmap

August – November 2009 – Roll out concept definition December 2009 – January 2010 – Gridstream MDUS software installation

February – April 2010 – Meter field installation August – December 2010 – Load Management integration

June 2010 – Spring 2012 – Operation phase / End user data management

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