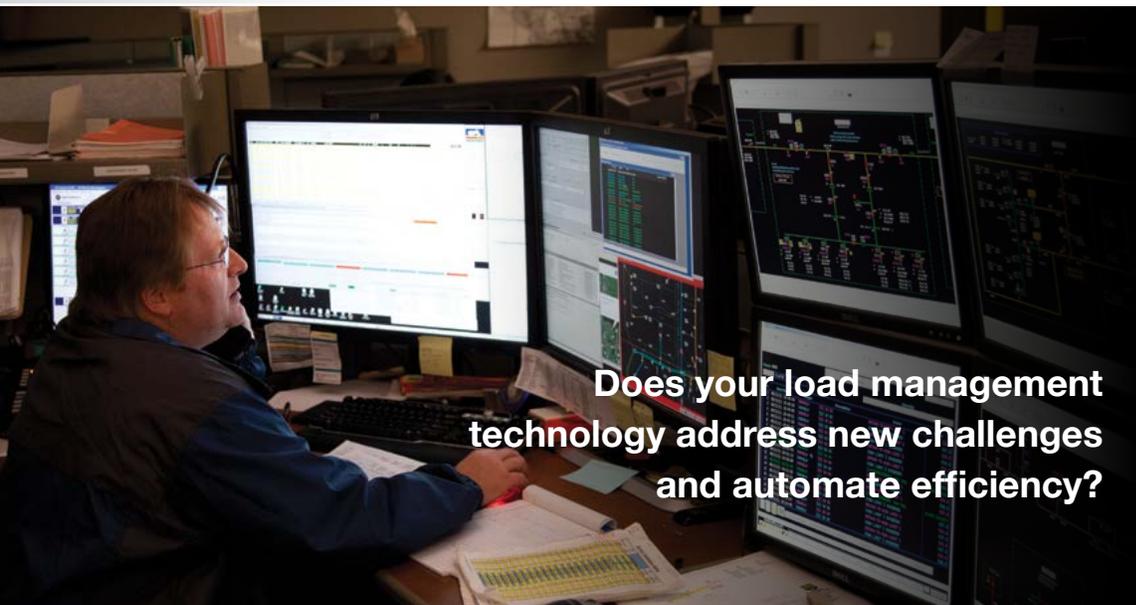


# Advanced Load Management

## Intelligent Load Management Choices



**Does your load management technology address new challenges and automate efficiency?**

Technology options for load management are quickly evolving in ways that provide more direct feedback and greater flexibility. Landis+Gyr delivers solutions that enable utilities to verify, monitor and forecast load control activity like never before.

### **Advanced Load Control**

Direct Load Control (DLC) remains a central piece of any load management solution. Today, utilities are utilizing DLC for more than just peak energy savings, relying on technology to help balance feeder loads, maintain infrastructure and even use load management as a virtual peaking plant. Landis+Gyr's Gridstream® solution relies on state-of-the-art software and intelligent sensors and control switches to provide direct control of large residential and light commercial loads, while automating the scheduling of load reduction to dynamically meet utility

requirements. In addition to appliance control, the solution also includes a programmable communicating thermostat option. Combined with mobile applications, this solution allows a new level of consumer engagement that can simplify load control recruitment.

### **Dynamic Voltage Management (DVM)**

DVM is another form of advanced load management offered as part of the Gridstream solution. By integrating intelligent sensors and automated control mechanisms throughout the distribution system, utilities are able to more precisely manage the voltage of energy delivered and reduce load when necessary by operating in the lower band of the ANSI voltage range. This capability improves power quality to the end consumer and also offers utilities an opportunity to benefit through improved energy efficiency or peak demand reduction.

### **HIGHLIGHTS:**

#### **Direct Load Control**

- Time-based or rebate-based programs
- Switch relay control for appliances
- Programmable Communicating Thermostat option
- Capacity management potential

#### **Dynamic Voltage Management**

- Premise voltage returned within minutes
- Significant peak demand reduction potential
- Power factor and overall power quality improvements

## An End-To-End Load Management Solution



### Applications

#### Demand Response

Options for shedding peak load include direct load control with switch relays, programmable communicating thermostats and voltage management. Intelligent systems verify and optimize load reduction during peak events.

#### Infrastructure Management

Not only are load management tools effective for managing peak power supply, they also provide ways to protect current infrastructure from over loading, which improves reliability and reduces the need for immediate investment to accommodate peak loads.

#### Capacity Management

Power Center operating software enables utilities to turn load reduction into capacity that can be sold into the market. The availability of detailed usage data and verification of control provide the granularity needed to support these types of programs.

#### Consumer Engagement

Landis+Gyr provides consumer tools, such as smart phone applications and web portals, that assist with program recruitment and aid consumers in managing their energy use.

#### EV Charging Stations

Hardware and software specifically designed for this challenge allow utilities to monitor, control and respond to signals at charging stations, while having the capability to implement a variety of tariffs.

#### Renewables Integration

Integration of solar and other renewables requires information and control at various points along impacted circuits. Landis+Gyr load management tools support energy management systems, such as the Toshiba Micro EMS, and help utilities monitor, forecast and balance circuits while integrating intermittent power supplies.