



DATA SHEFT

Smart grid cybersecurity solutions

Proven, market-leading solutions to help utilities identify risk and protect and defend the grid

Information technology is helping to create a smarter grid. Utilities are deploying open systems and common technology platforms to facilitate greater interoperability. IT and operations technology (OT) are converging, unifying assets and increasing intelligence and control; and more grid applications and systems are emerging to manage growing smart grid complexity. This new technology foundation delivers tremendous value but can expose the grid to new vulnerabilities. Globally, there are a growing number of cyber breaches, leading to performance degradation and business losses. As the cost of disruption rises, utilities are being compelled to take a new approach to security. The first step to a safer grid? Accept that there is a problem.

IT/OT integration, engineering and data expertise

OMNETRIC Group is dedicated to companies and energy agencies that are part of the energy economy today and in the future. A smart grid solution provider and joint venture between Siemens and Accenture, we reach across the two technology domains that have converged as a result of modernizing to a smarter grid: energy engineering systems and IT systems.

Our team has experience with the technologies supporting devices and sensors in the field, to those running the control room. Our understanding of utilities' business and operational challenges enable us to review utility data, operations and security practices, and put in place the compliance and security frameworks needed. Modern smart grid solutions no longer neatly fit the old blueprint and

utilities need a new approach to their security strategies. For example, leading-edge solutions, such as virtual power plants or advanced smart metering systems, involve a wide range of technologies from cloud-hosted systems to public key infrastructure, or field devices to national gateways.

The right security solution with appropriate security levels

The smart grid is a system, not just a collection of individual components. To defend the grid, security needs to be an intrinsic part of operations and management, projects and solutions, and interactions across the energy value chain. In real terms, this means that utilities must not only keep up to date with system updates and patches, they must constantly test systems for new vulnerabilities. They also need to better manage the huge volumes of data generated by grid devices and digital grid networks. This has made it vital to review security and data frameworks to assess compliance and ensure a security posture that addresses new risks.

A standards-based approach to security lays the groundwork for the creation of a strong defense and, more importantly, effective response and recovery. For example, OMNETRIC Group makes use of the National Institute of Standards and Technology's (NIST) Framework for Improving Critical Infrastructure Cybersecurity, to help utilities learn about the range of actions needed to improve grid security. We also work with ISA62443 and ISO27001 standards amongst others.

An open approach, with tools you can use

Our approach: defining the right solution for each utility with the appropriate security strategies.

Utility companies need a layered, multi-dimensional security strategy, one that encompasses physical devices as well as policies, procedures and awareness. In our experience, that requires bringing together experts who understand field technologies, grid control centres, and the IT systems such as meter data management, which underpin the modern smart grid.

Together, they identify vulnerabilities related to those devices and systems, and also the integration between them. We work closely with customers to develop security solutions that fit their business. We leverage open methodologies, introducing approaches that can be used and re-used to maintain and refine their security stance for the long-term.

Understand, identify, protect – detect, respond, recover!

Our methodology builds on the NIST Framework to support utilities in improving their security posture:

- Understand cybersecurity for utilities helping utilities understand what cybersecurity means to them and how it supports their business objectives.
- Identify An audit of systems, processes and assets to identify gaps, set priorities and put in place governance and a risk management strategy to support operational decisions.
- Protect Implementation of access control, awareness and training, data security, security policies and procedures, maintenance of key equipment and technology security solutions.
- Detect Making use of data and engineering experts together with advanced tools that help detect breaches.
- Respond Put in place mechanisms and approaches to quickly and effectively respond to threats across all levels of the organization.
- Recover Create a prioritized and phased recovery plan in accordance with organizational priorities and strategic objectives.

Get in touch

We have the sector knowledge, the engineering, data and security skills and experience to deliver security solutions that meet the needs of energy sector organizations. We understand the challenges of working with critical infrastructure and the importance of grid reliability and efficiency. We are also aware of the impact of security threats and the speed at which new threats are emerging. Contact us today to start the conversation.

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About OMNETRIC Group

OMNETRIC Group is dedicated to the global delivery of integrated information technology and operational technology solutions and services, helping utility companies to achieve greater grid reliability and efficiency. OMNETRIC Group is a joint venture between Siemens AG and Accenture. Combining Siemens' leading energy technology product portfolio with Accenture's systems integration, consulting and managed services capabilities, OMNETRIC Group can support clients with innovative solutions wherever they may be on their path to a smarter grid. For more information, visit www.omnetricgroup.com