GE Digital

Reliance AEMS External User/Office System

Providing a highly secure method for AEMS situational awareness outside the control room using Unidirectional Security Gateways

SECURE VIEW OF REAL-TIME DATA FOR USERS OUTSIDE THE CONTROL ROOM

GE Digital's Reliance AEMS External User / Office System is an independent SCADA platform that can sit in the corporate environment. The AEMS system can be physically separated from the production control room environment using Waterfall's Unidirectional Security Gateways, providing true view-only access to external users.

OVERVIEW

One of the challenges of maintaining the overall security of a production AEMS is the challenge of minimizing the number of users that have access to the secure system. By placing a small footprint SCADA system in the corporate environment, the external view-only users can be restricted from the production AEMS, thereby reducing the number of users in the AEMS.

> **Minimize the threat of external actors' access to the secure AEMS**

Firewalls provide limited protection to industrial networks. All connections through firewalls are intrinsically bi-directional, AEMS connections included. In addition, firewalls are software, with vulnerabilities and the potential for misconfiguration of the firewall itself.

On the other hand, Unidirectional Gateways are physically able to send information in only one direction, and not physically able to send any information or attacks back into the secure production network. Given that there is no physical path back into the production environment, easy-to-use-tools and automatic processes are provided to ensure that the AEMS system in the corporate environment is kept synchronized with the system in the production environment.

The joint GE AEMS & Waterfall Unidirectional Security Gateway solution enables corporate visibility into the production control environment, while protecting that environment absolutely from any change triggered by the enterprise network and from the risk of cyber compromise.

KEY OUTCOMES

Highly Secure:

▶ Control room AEMS protected by Unidirectional Security Gateways

▶ Corporate and external users gain view-only access to the real-time displays without any physical connection to the production AEMS environments

▶ Complies with and reduces compliance costs for global industrial security standards, including French ANSSI requirements, IEC 62443-3-3 recommendations and NERC CIP regulations.

Optional: Secure replacement for the "Corporate IS&R" in the DMZ

KEY FEATURES

▶ Database and display updates are automatically pushed from the AEMS to the External User / Office System

▶ Real-time data is streamed through the Unidirectional Gateways

▶ Includes facilities for integrity synchronization

▶ Tags, memos, operator entries, alarm and events are kept in sync

▶ User credentials are managed independent from the secure production environment

▶ Independent historical collection