Comprehensive Cybersecurity Solutions for the Power, Water and Wastewater Industries

The digital transformation of the power and water industries has expanded connectivity to more systems, significantly increasing the risk of cyber threats to mission critical assets. Emerson combines its Power and Water Cybersecurity Suite with a broad portfolio of cybersecurity services to deliver platform-independent solutions that safeguard all your assets and strengthen your security posture. Our forward-looking and adaptable cybersecurity programs bridge the gap between operational technology (OT) and information technology (IT) to mitigate risk and maintain reliable operation by proactively addressing threats, enhancing protection and streamlining security program management.

- **Proven cybersecurity technologies, services and programs that apply best practices to help meet standards and maintain dependable asset operation.**
- **Vendor-agnostic solutions that protect Ovation™ and non-Ovation systems used within an individual plant or across an entire fleet or district.**
- **Dedicated, knowledgeable and certified implementation team with a unique blend of in-depth cybersecurity, control system, networking and industry-specific expertise.**
- **Streamlining repetitive security tasks and report generation simplifies management, reduces implementation time and alleviates staff workloads.**
- **Sustainable, actionable and scalable programs specifically tailored to supplement site resources and help comply with regulatory requirements.**
- **Comprehensive products and services from a single, trusted vendor with a history of long-term and dependable customer support.**
Cybersecurity Solutions Designed for Operational Technology

Emerson is uniquely qualified to help power, water and wastewater customers adapt to the new digital era by protecting systems from threats and cyber attacks. Our Power and Water Cybersecurity Suite consists of an array of trusted software and hardware solutions, tested and customized to provide protection in industrial control system environments. A dedicated team of experts use a defense-in-depth approach to design and deploy cybersecurity solutions that help safeguard people, assets and data from cyber threats that can pose a significant risk to your operations.

The U.S. Department of Homeland Security has designated the Ovation Control Solution as Qualified Anti-Terrorism Technology. This Designation provides significant tort protection for claims arising out of acts of cyber terrorism as defined under the U.S. SAFETY Act. The Designation covers Emerson’s Ovation Control System, Power and Water Cybersecurity Suite and Cybersecurity Services. For more information on what protections the Designation provides, visit https://www.safetyact.gov.

Power and Water Cybersecurity Suite Modules

- **Cybersecurity Dashboard**
  - Centralizes management and reporting for installed security modules

- **Antivirus Protection**
  - Safeguards against known malware infections

- **Application Control**
  - Mitigates unknown code execution using whitelisting technology

- **Configuration Management**
  - Centralizes change management and file integrity checking

- **Device Control**
  - Prevents use of unauthorized removable media to help stop the propagation of malware

- **Network Intrusion Detection**
  - Monitors and detects suspicious traffic using deep packet inspection

- **Patch Management**
  - Identifies vulnerabilities and installs available third-party software patches for mitigation

- **Rogue System Detection**
  - Provides notification of unknown network-connected devices

- **System Backup & Recovery**
  - Performs image-based backups of critical machines and supports universal restore

- **Vulnerability Assessment**
  - Scans systems for vulnerabilities and provides mitigation guidance

Comprehensive Cybersecurity Services

- **Scheduled**
  - Planned deployment of services to maximize efficiency while minimizing workforce disruptions:
    - Perform monthly patching
    - Automatic antivirus updates
    - Regular system backup and recovery

- **Emergency**
  - Provide incident or unplanned outage response support to diagnose and mitigate cybersecurity issues:
    - Analyze root cause
    - Recommend mitigating actions
    - Provide recovery assistance

- **Compliance**
  - Update or create programs that provide an electronic record to help meet regulatory obligations:
    - Review current programs
    - Gather evidence
    - Generate reports

- **Fleet or District**
  - Develop, implement and maintain uniform security programs on a fleet- or district-wide basis:
    - Define program scope
    - Establish consistent policies
    - Provide supplemental manpower

- **Network**
  - Analyze network configurations and apply solutions that protect system integrity:
    - Backup configurations
    - Harden network devices
    - Monitoring and reporting solutions

- **Assessment**
  - Audit plant systems and provide recommendations to strengthen overall security posture:
    - Identify assets
    - Assess vulnerabilities
    - Deploy security safeguards

- **Consulting**
  - Perform gap analysis and develop custom security strategies based on industry standards and best practices:
    - Provide technical support
    - Develop custom programs
    - Provide solution guidance
Proven, Reliable Programs for Securing Assets

Emerson continually invests in best-in-class defense technologies and services to protect critical systems in a dynamic threat environment. We deliver sophisticated, multi-layered, vendor-agnostic responses to complex problems that integrate management of industrial control system equipment and network components (both IP and non-IP based) of varying vintages regardless of supplier or protocol.

Customized cybersecurity offerings help identify your overall cybersecurity posture, bring full visibility to asset security and ensure the reliability and performance of your Ovation and non-Ovation systems. For the power-generation industry, Emerson has solutions for all plant types ranging from a single unit to large fleets with 50 or more geographically dispersed sites. For the water industry, our solutions help protect everything from small municipalities to city-wide districts which process billions of gallons per day.

### Single Plant Deployment

Recent classification as a medium-impact bulk generating asset required this plant to comply with NERC CIP standards, which was difficult to accomplish with only a two-man staff responsible for cybersecurity at the 12-plus unit facility.

Emerson performed a comprehensive cybersecurity plant assessment, providing specific recommendations for immediate, short- and long-term actions to meet customer goals.

- Decreased patch deployment time from 45 to 15 days using automated tools
- Expanded staff responsibility to encompass 50% more assets without additional manpower
- Streamlined cybersecurity program management
- Invested in ongoing services for sustained system reliability

### Enterprise-Wide Deployment

Top executives of this company challenged management to standardize their security program approach and improve the cybersecurity posture of the entire fleet while complying with NERC CIP regulations and internal security programs.

Emerson’s dedicated team collaborated with the customer to successfully design and implement a fleet-wide solution to help secure this critical infrastructure and simplify security program management.

- Met aggressive 8-month deadline without process disruption
- Program covered 22 sites that generate more than 26,000 MWs across five states
- Installed 39 Power and Water Cybersecurity Suites

For more information:
www.Emerson.com/Ovation

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