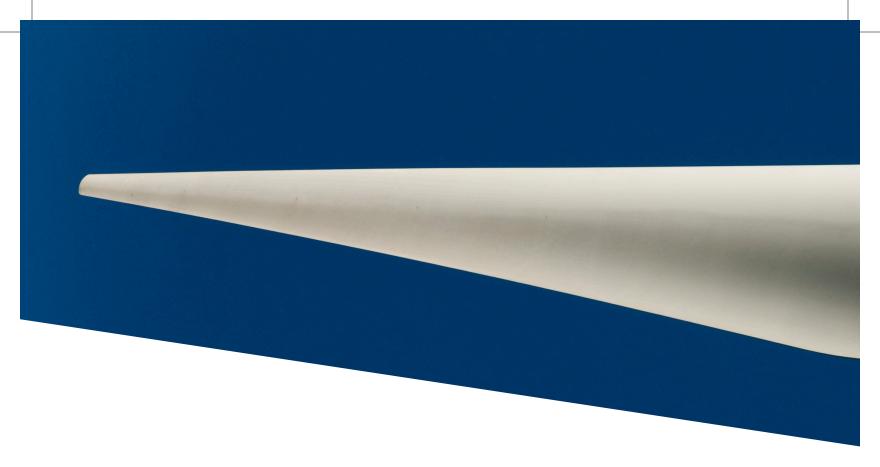INDUSTRIAL DEFENDER

INDUSTRIAL DEFENDER®

Clean Power Generation

WIND POWER GENERATOR BREEZES THROUGH NERC CIP AUDIT; SAVES $3 MILLION IN UPGRADE COSTS

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COMPANY PROFILE

As a critical infrastructure developer, owner, and operator of power generation facilities in North America and Europe, this utility markets a wide range of clean energy products from a portfolio of natural gasfueled, solar, and wind energy generation projects.

With over 6,600 MW of utility-scale renewable and natural gas-fueled power generation facilities globally, this utility prides itself on being North America's largest independent wind power generation company. The company operates and maintains more than 1,000 turbines at dozens of wind farms across North America.

THE SITUATION: TIME CONSTRAINED FOR COMPLIANCE

As a designated critical infrastructure, this utility must operate with a zero down time policy, thus maintaining reliability and availability while ensuring safety of workers and health of the control system is paramount.

When the utility brought their new 500MW generation facility online in early 2009 , it was designated a critical cyber asset by the North American Electric Reliability Corporation under their Critical Infrastructure Protection (NERC CIP) standards since it exceeded the 300MW baseline. NERC gave the utility their deadline for compliance: September 2011. With the average NERC CIP compliance program taking 30 months to achieve, the program needed to be enacted quickly.

They first reached out to their multiple control system vendors in search of a purpose-built solution instead of a general enterprise IT solution. While each vendor offered a comprehensive solution for their respective system, implementing a measurable security and sustainable compliance program across the entire control system environment would still require numerous solutions. Having multiple solutions would, in turn, require more equipment, maintenance, training, staff resources and budget than was possible. After presenting the initial findings to management, the project team was encouraged to search for external solutions that would work across their environment and would be scalable enough to handle future projects.

"Industrial Defender's technologies [were] an incredible maintenance cost savings and immediately justified the purchase."

CUSTOMER PROFILE

Largest independent wind power generation company in North America with global power generation infrastructure.

GOAL & CHALLENGES

- ▶ Enact sustainable compliance program to meet/exceed NERC CIP standards
- ▶ Create and implement a measurable security monitoring program

RESULTS

- ▶ Improved revenue per headcount KPI
- ▶ Reduced system maintenance costs
- ▶ Automated regulatory compliance

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With marching orders in hand, the project team assembled their requirements:

- NERC CIP compliance reporting
- Automated data collection
- Continuous Security Monitoring
- Collection of Ports and Services data
- Asset management
- Firewall management
- Support of vulnerability assessments
- Interoperable with multiple control systems

THE SOLUTION:
INDUSTRIAL DEFENDER ASM™

With a set of robust requirements and the significant constraints of the control systems environment, the team began to search for a solution from a broad range of vendors. They quickly found that few had actual experience working with the real-time embedded operating systems within industrial control system networks or with the specific assets inside the control

networks such as RTUs and PLCs. Such experience is a fundamental prerequisite for the ability to support multiple control system vendors in a single solution.

The utility found the only solution provider that understood their challenges, met their requirements, and delivered a sustainable compliance program was Industrial Defender Solutions. With a total deployment time of less than 4 weeks from project scoping to system operation, systems engineers deployed the Industrial Defender ASM for less than 50% of the cost of comparable solutions, and in a fraction of the time other vendors estimated. The deployed solution included:

- Event/log management
- Compliance reporting
- Intrusion Detection System
- Unified threat management

"Industrial Defender ASM covers all our control systems in a single pane of glass whereas everything else requires multiple products to meet compliance requirements."

THE RESULT:
BEYOND A COMPLIANCE PROGRAM

The Industrial Defender ASM exceeded the company's requirements for NERC CIP compliance and, thanks to the automated data collection, no additional staffing was required. Preparing for a compliance audit had once been an extremely tedious, manual endeavor requiring many operators to collect information from a wide range of devices.

With fully automated data collection, the staff previously assigned with compliance related tasks were now able to focus on maintaining system uptime. The utility could now set baselines for software application, ports and services, and patch baselines using Industrial Defender ASM and, with a few mouse clicks, report against these

baselines to identify variances, continuously ensuring system stability, versus manually collecting data from a large number of endpoints. Prior to deploying Industrial Defender ASM that data collection could typically take 2-3 hours per device.

While they benefited from having operators focused on primary duties, the major cost savings came from delaying a system upgrade to the tune of $3MM.

SYSTEMS ENGINEERS DEPLOYED A COMPREHENSIVE SOLUTION FOR LESS THAN 50% OF THE COST OF COMPARABLE SOLUTIONS.

"After meeting with us and reviewing our Technical Feasibility Exceptions (TFEs), the NERC auditors accepted Industrial Defender's technologies and threat mitigation strategies that we put into place, instead of doing the full operating system upgrade they had earlier requested. This was an incredible maintenance cost savings and immediately justified the purchase above and beyond what we saved by not deploying multiple point solutions."

EMS MANAGER

THE INDUSTRIAL DEFENDER DIFFERENCE

Industrial Defender solutions deliver cybersecurity, compliance and change management for industrial control systems (ICS). Over the last decade, the organization has successfully developed and delivered a single unified platform to secure and manage heterogeneous control environments for critical infrastructure operations. Our flagship product, Industrial Defender Automation Systems Manager™ (ASM), has become the de facto standard to ensure the availability and reliability of key industrial processes amid escalating cyber threats, increasing regulatory burdens and accelerating ICS management challenges. Over 400 companies in 25 countries rely on Industrial Defender solutions to reduce costs, manage risks and enhance operational excellence.

FOR MORE INFORMATION

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