SEL

Project Highlight

Energy utility executes large-scale internal network security monitoring (INSM) project

Utilities can struggle to find a partner capable of managing the complexity of large cybersecurity compliance projects, such as the installation of INSM sensors across a transmission network.

SEL Cyber Services has the expertise to design network architectures, conduct front-end engineering design (FEED) studies, and manage deployment of these large-scale projects. With vertically integrated manufacturing and rigorous project management capabilities at its disposal, SEL is an integrator that offers distinctive value in the industry.

Challenge

An energy utility needed to proactively implement INSM across its transmission substations in anticipation of the upcoming NERC CIP-015 compliance regulations. Unfortunately, the scale of the project—deploying 450 sensors—posed logistical, technical, and integration challenges. Additionally, by relying on third-party procurement, the utility anticipated delays and visibility issues that could complicate scheduling and delivery. The utility was not confident that they would complete this complex project on time and on budget.

Solution

To address these challenges, the utility chose to engage SEL Cyber Services for their expertise in designing and implementing secure, large-scale networks in heavily regulated environments. SEL conducted a comprehensive FEED study and developed a Functional Design Specification to guide consistent implementation across all sites. Recognizing inefficiencies in the supply chain, SEL brought the manufacturing and configuration of Dragos sensors in-house, eliminating the need for a third-party supplier. This shift allowed SEL to directly manage procurement, logistics, and invoicing, while also collaborating closely with Dragos to enhance sensor functionality and tailor the solution to the needs of the utility.

Results

SEL Cyber Services ensured a smooth rollout, eliminated part delays, and improved coordination across stakeholders and locations. The utility gained a robust and scalable cybersecurity monitoring system with detailed documentation that supports onboarding, compliance, and future expansion. The success of the project led the utility to adopt the Dragos sensor deployment as a new standard for all future substations and generated interest in replicating the model across other areas of the business, including distribution.

About SEL

SEL is a 100 percent employee-owned company that specializes in creating digital products and systems that protect, control, and automate power systems around the world. This technology mitigates blackouts and improves power system reliability and safety at a reduced cost. Headquartered in Pullman, Washington, SEL has manufactured products in the United States since 1984 and serves customers worldwide.

Cybersecurity philosophy

We build layers of defense and maintain the integrity of each layer's purpose—in other words, we apply the right technology at the right layer. We believe simpler products are easier to defend and that the safety of the power system and availability of the protection and control devices come first.

Reliability

SEL products are designed and manufactured for the world's most challenging environments, exceeding all industry standards for temperature, shock, and electric stress.

Our products have a mean time between returns for repair (MTBR) of more than 250 years, based on observed field performance. This means that if you have 250 SEL products installed in your systems, you can expect to have less than one unscheduled removal from service per year for any reason, whether it's a defect or an external factor such as overvoltage, overcurrent, wildlife damage, or environmental exposure.

Warranty

SEL backs our products and commitments with a ten-year warranty, no-charge diagnostic and repair services, local support, and a variety of test procedures and certifications.

Support

SEL support teams are stationed in regional offices around the globe and staffed with application engineers who are experts in our products and in power system applications. We offer 24/7 technical support at no cost for the life of your SEL products.

Contact us

To learn more about partnering with SEL Cyber Services, contact secure@selinc.com or visit selinc.com/cybersecurity.

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