

Thales Helps a Canadian Energy Utility Secure Smart Meters, Increase Resilience, and Reduce Costs

The Business Challenge

A Canadian energy utility was transitioning from analog to connected digital smart meters to improve service and resilience, and to reduce costs for over two million customers. This highly regulated utility needed to comply with strict privacy and resilience regulations. The digital security solution had to be compatible with Cisco Field Network Director (FND) to support both 75% of “terrestrial” installations and 25% “satellite” installations.

The Solution

The utility deployed Thales Luna Hardware Security Modules (HSMs) to secure all certificate authentication and every command to millions of Itron smart meters. The organization integrated the FIPS 140-2 Level 3 Luna HSMs with the Cisco Field Network Director FND to provide complete security for smart meters connected via cable or satellite.

Luna Hardware Security Modules

Thales Luna HSMs are dedicated crypto processors specifically designed to protect the crypto key lifecycle. HSMs act as trust anchors that protect the cryptographic infrastructure of some of the most security-conscious organizations in the world by securely

managing, processing, and storing cryptographic keys inside a hardened, tamper-resistant device. Enterprises use HSMs to protect transactions, identities, and applications, because HSMs excel at securing cryptographic keys and provisioning encryption, decryption, authentication, and digital signing services for a wide range of applications.

Thales Luna HSMs provide the highest level of security by always storing cryptographic keys in hardware. They provide a secure crypto foundation because the keys never leave the intrusion-resistant, tamper-evident, FIPS-validated appliance. Since all cryptographic operations occur within the HSM, strong access controls prevent unauthorized users from accessing sensitive cryptographic material. Thales also implements operations that make the deployment of secure HSMs as easy as possible. Lunas HSMs can be integrated with Thales Crypto Command Center for quick and easy crypto resource partitioning, reporting, and monitoring.

“ Thales Luna HSMs allowed customer to comply with industry regulations, improve network resilience, and lower overall cost of operations.”

The Results

1. Achieved audit compliance with industry regulations, such as the North American Electric Reliability Corporation (NERC), and privacy legislation, such as PIPEDA, and data security mandates, such as PCI.
2. Improved network resilience by securing connectivity of smart devices that provide real-time feedback on outages and consumption.
3. Lowered overall cost of operations by reducing the number of in-person meter inspections, curbing electricity theft, and simplifying management.



About Thales

The people you rely on to protect your privacy rely on Thales to protect their data. When it comes to data security, organizations are faced with an increasing number of decisive moments. Whether the moment is building an encryption strategy, moving to the cloud, or meeting compliance mandates, you can rely on Thales to secure your digital transformation.

Decisive technology for decisive moments.