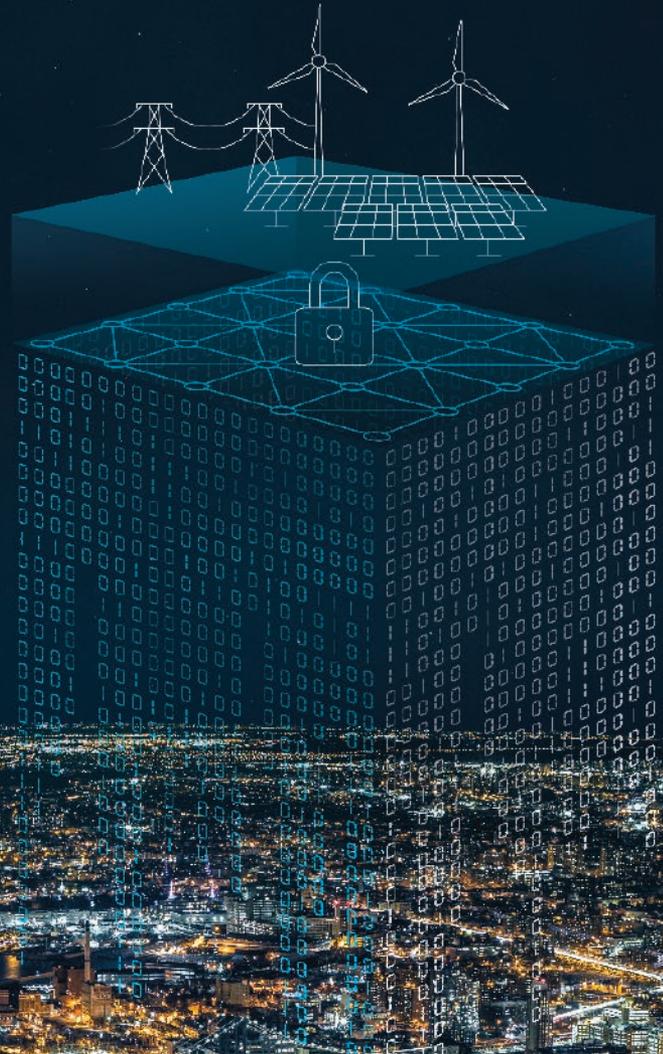


# Leading the Digital Utility Transformation

The migration to the "digital utility" is being driven by trends such as evolving customer expectations, micro grids, network interconnectivity, and AMI. Cyber security, equipment interoperability (IEC-61850), intelligent network deployment, and IT/OT convergence are major challenges on the road ahead.



Are you ready for this journey?

Ask us how our Intelligent Networks and Cybersecurity end-to-end service offering can help you reap the benefits.

[snclavalin.com/en/inc](http://snclavalin.com/en/inc)



**SNC • LAVALIN**

Building what matters

# Intelligent Networks and Cybersecurity

## Digitizing what matters

Our expertise in the energy sector comes from a century of designing, constructing, operating and maintaining power plants, and transmission and distribution systems around the world.



Our multi-disciplinary team specializes in networking, operational technology, IT, cybersecurity, and critical infrastructure protection. It is this unique combination of knowledge that enables us to develop effective and proactive long-term strategies to help modernize your grid.

### Intelligent Networks

We specialize in the engineering, consulting and integration of the telecommunication and information communication technology (ICT) systems that support utility operations.

A sample of our expertise includes:

- > Network Transport Technology: IP/MPLS
- > Advanced Metering Infrastructure (AMI)
- > Optical Fiber: DWDM, OTN
- > Wireless Technology: Microwave Radio, DAS
- > Data Centers: HCI
- > Control Rooms: (NOC/SOC), SCADA, Telemetry
- > Security: Video Analytics, Access Control
- > Legacy System Integration: SDH/SONET, ATM, TDM

### Digitization of Utility Infrastructure

To help our clients reduce the cost of their digital transformation, we are leveraging equipment meeting international standards, such as IEC 61850, which speeds-up deployment and ensures interoperability between systems.

## Speak to our experts

to learn how we can help make your next project a success.

[cip-ot-digital@snclavalin.com](mailto:cip-ot-digital@snclavalin.com)

### Cybersecurity

Our comprehensive security offerings ranges from specialized engineering and consulting services to enterprise strategic plans. Our cost-effective solutions are adapted to every situation.

#### Corporate security/Governance

##### COMPLIANCE PROGRAM DEVELOPMENT

- > NERC CIP compliance & reporting
- > ISO 27001 compliance
- > Security maturity assessments
- > Drafting of security policies and procedures
- > Security awareness program
- > Media protection

##### COMPLIANCE MAINTENANCE

- > Security governance optimization
- > Insider threat protection
- > Phishing simulations
- > Threat and incident response management

#### IT/OT security

##### ARCHITECTURE & IMPLEMENTATION

- > OT/IT security architecture
- > Network security
- > LAN/WAN engineering (Gigabit Ethernet, SONET, MPLS)
- > Wireless network engineering
- > Legacy SCADA system integration
- > IEC 61850 Energy management systems
- > Design of network management centers

##### IT/OT SECURITY MANAGEMENT

- > Identity and access management
- > Change management program
- > Security event log management engineering

##### TESTING

- > Penetration testing
- > IEC 61850/DNP3 mapping tests
- > IEC 62351 integration tests

### Security Maturity Assessment Program (SMAP)

We conduct assessments tailored to power utilities to measure the level of maturity of their physical, IT/OT and human resources security programs. Our approach allows utilities to quickly assess the security readiness of their environment in a highly cost effective manner.