

JOB DESCRIPTION

Job Title: OT Network and SCADA Technician Position Number: 88-08

Incumbent: Vacant Effective Date: April 2026

Employment Status: Permanent Pay Level: 9 Bargaining Unit: X Yes No

Supervisor's Title: Supervisor, OT and Automation Department: Operations

SUMMARY

The Operational Technology (OT) Network & SCADA Specialist is responsible for the installation, maintenance, and support of Operational Technology (OT) network infrastructure and SCADA systems across the organization's generation, transmission, substation, and distribution environments.

This position supports reliable and secure communications between the Systems Control Center (SCC), substations, plants, and remote sites, while contributing to network and system design and project delivery. The position combines hands-on field support with network administration, systems support, and technical project involvement in a high-availability, safety-critical environment.

DESCRIPTION

OT Infrastructure & Network Administration

- Administer, maintain, and troubleshoot SCADA/OT network infrastructure, including switches, routers, firewalls, wireless systems, and telecommunications equipment.
- Install, configure, and support communication systems, including fiber optic networks, LAN/WAN, microwave, radio, and point-to-point links.
- Configure VLANs, routing, and secure network segmentation aligned with OT security principles (zones and conduits).
- Diagnose and resolve network connectivity, performance issues, and hardware failures.
- Integrate legacy communications infrastructure with modern OT and IT network environments.
- Optimize network configurations to improve performance, reliability, and security.
- Support vulnerability assessments, remediation, and incident response activities.
- Ensure compliance with applicable standards and frameworks (e.g., NERC CIP, IEC 62443, NIST).
- Enforce secure network segmentation and system hardening practices.

SCADA & Systems Support

- Support SCADA/OT systems, including SCADA/ADMS platforms, RTUs, PLCs, HMIs, and data historians.

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- Test, calibrate, troubleshoot, and maintain control system devices (e.g., relays, PLCs, network equipment).
- Perform firmware upgrades, patching, and lifecycle management activities.
- Assist with commissioning, integration, and validation of new SCADA and communications systems.
- Interpret and troubleshoot complex data, voice, and video communication systems.

Systems Administration

- Administer OT servers and platforms, including Windows Server, Linux, and virtualization environments (e.g., VMware, vCenter etc).
- Manage backups, redundancy, and disaster recovery solutions.
- Coordinate controlled patching activities aligned with operational requirements.
- Manage user access and authentication within SCADA/OT environments.

Project Management & Delivery

- Provide technical input, design support, and coordination for capital and operational projects.
- Support multiple concurrent OT network, SCADA, and cybersecurity initiatives.
- Participate in system design, procurement, implementation, testing, and commissioning.
- Track project progress, risks, and issues, and provide status updates to stakeholders.
- Ensure all activities comply with change management, safety, and operational requirements.

Documentation & Asset Management

- Maintain accurate and up-to-date network diagrams, system configurations, and architecture documentation.
- Maintain OT asset inventories, including hardware, software, and firmware.
- Document incidents, system changes, maintenance activities, and operational procedures.
- Update technical drawings and maintain records of work performed.

Field Support & Operations

- Provide onsite technical support at substations, plants, and remote facilities.
- Support installation, configuration, commissioning, and maintenance of OT network and SCADA equipment.
- Respond to emergency situations and restore communications systems in a safe, reliable, and efficient manner.
- Support outage, maintenance, and operational activities in high-availability environments.

Stakeholder & Vendor Coordination

- Liaise with IT, Engineering, and Operations teams on OT communications and SCADA systems.
- Coordinate with vendors and service providers for procurement, technical support, and issue escalation.
- Provide technical recommendations for system improvements and upgrades.



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Safety, Compliance & Governance

- Adhere to all safety standards, safe work practices, and protection plans.
- Ensure compliance with corporate policies, procedures, and regulatory requirements.
- Maintain confidentiality of corporate and operational information.
- Performs other related duties.

KNOWLEDGE, SKILLS, AND ABILITIES

Education

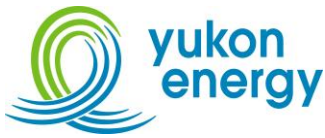
- Bachelor's degree in Computer Science, Information Technology, Engineering, Network Administration or other related field
- Experience working in an electrical utility is an asset
- Experience working/supporting SCADA and OT environments an asset
- Certifications such as:
 - Cisco Certified Network Associate (CCNA).
 - Cisco Certified Network Professional (CCNP).
 - CompTIA Network+.
 - CompTIA Security+.
 - GIAC Security Essentials (GSEC).
 - GIAC Global Industrial Cyber Security Professional (GICSP).
 - ISC2 Certified in Cybersecurity.

Experience

- 3–5+ years of experience in network and/or systems administration within an IT or OT infrastructure environment.
- Experience supporting SCADA or industrial control systems is preferred.
- Experience working for a power utility company and understanding of fully integrated power systems, including SCADA control systems.
- Demonstrated ability to manage multiple projects and competing priorities.
- Experience supporting AMI implementation is an asset.

Technical Skills

- Strong understanding of OT networking, including switching, routing, and network segmentation.
- Knowledge of OT cybersecurity principles, including firewalls, IDS/IPS, and secure communications.
- Familiarity with industry standards and frameworks (e.g., NERC CIP, IEC 62443).
- Experience with industrial protocols (e.g., Modbus TCP/IP, DNP3).
- Experience with server administration and virtualization platforms.
- Familiarity with PLCs, RTUs, and smart grid technologies.



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Key Competencies

- Strong analytical and problem-solving skills.
- Ability to manage multiple priorities and support concurrent projects with effective planning and organizational skills.
- Adaptability to evolving technologies and operational requirements.
- Ability to work in high-availability, safety-critical environments.
- Effective communication and collaboration with technical and non-technical stakeholders across departments.
- High attention to detail with strong documentation discipline.
- Commitment to safety, reliability, and continuous improvement.

WORKING CONDITIONS

Exposure to heights, plants, and substation environments. May be exposed to inclement weather while working outside and when travelling. Travel and periods of immediate stand-by coverage are requirements of this position. Occasional remote site access work may require transportation by helicopter.