Sydney WATER

Job Profile

SCADA Field Commissioning Engineer

Group: Finance, Commercial & Digital

Job Summary

To be completed by People and Culture team			
Job Family	Information Technology	**Career Stage**	D
Job Function	Programming and Development	**Career Stream**	Professional
Coverage EA = Enterprise Agreement ICE = Individual Contract of Employment	EA	**Last Modified Date**	18/10/2023
To be completed by Manager ~ (Team Size relates to People Leadership)			
Work Environment	Field	**Team Size**	
People Leader	No	**Indirect Team Size**	

Who we are.

At Sydney Water, we exist for our customers. We're more than 3,500 people working together, striving to do more and be better—better for the environment, our customers, our people, and our water. Our people are passionate about working together, and driving agility, accountability, innovation, sustainability, and exceptional customer experiences.

Sydney Water is the main provider of water, wastewater, recycled water, and stormwater services in Greater Sydney. Our employees are dedicated to our customers, ensuring services are reliable and affordable, we are proactive and easy to engage with, forward-thinking, and environmentally focused.

Working with us means helping to provide essential services, safeguarding Sydney's future with a sustainable water supply, and protecting our iconic waterways. Our strategy guides our journey to enhance customer outcomes and continue delivering robust services to our city into the future.

Job Purpose

The Digital – Operational Technology - Instrumentation, Automation and Control Services Team, (IACS) provide specialist services to Sydney Water for SCADA monitored Network Facilities
To be part of a team responsible for the management of the technical activities associated with the planning, delivery and commissioning of IICATS/SCADA technology, including:
• Commissioning of assets onto IICATS/SCADA systems;
• Inspection of electrical control cubicles and site electrical wiring;
• Verification of critical interlocks and alarms to ensure the safe and reliable operation of hydraulic assets;
• Investigation and provision of technical advice on issues related to SCADA/IICATS software and its application to the water and wastewater systems.

Accountabilities

Job Specific	• As a SCADA Field Commissioning Engineer, you will be required too: • Conduct field commissioning of IICATS/SCADA sites in accordance with defined quality procedures and to ensure the required standards of workmanship. • Calibrate site instrumentation and verify calibration ranges against the IICATS/SCADA software configuration. • Utilise knowledge of diagnostic software tools to identify and recommend improvements to IICATS/SCADA software sequences. • Utilise knowledge of electrical control circuits and P&I diagrams to undertake fault diagnosis and recommend minor modifications to electrical control circuits or instrumentation loops. • Assist in the implementation of strategies to improve performance of IICATS/SCADA systems and analyse and report on system capability. • Utilise integrated change management systems to report Non-Conformances, defects and software configuration changes • Apply SWC Instrumentation and Control Standards and appropriate Electrical Standards to inspect IICATS/SCADA control cubicles and site wiring. • Assist in the preparation of detailed investigation reports on IICATS/SCADA engineering aspects of projects, including site investigations, audits and development of project scope definitions. • Assist in project planning, particularly related to audits, testing, FAT, SAT, commissioning and other matters relevant to the project. • Attend project, HAZOP, CHAZOP and safety meetings and workshops if required • Liaise with and advice external and internal clients on technical issues related to the IICATS/SCADA requirements. • Ensure delivery of projects within the set time, cost and quality targets and to the meet customer satisfaction. • Assist in the preparation of procedures for the commissioning of control and monitoring system assets. • Respond to technical enquires and provide critical system fault response, diagnoses and rectification during the commissioning of IICATS/SCADA assets • Accountable for managing and responding to live sites, including making decisions ensuring contingency plans are in place and correct equipment available. • Update and review work procedures and reports where required. • Be an active member of the team and provide verbal and written inputs at “Tool Box” talks and project resource scheduling

Role Requirements

Education / Qualifications

Required	• Appropriate tertiary qualifications in Electrical Engineering or Control Engineering or a related discipline with proven experience in the commissioning of IICATS/SCADA or equivalent process control systems.
Desired	•

Certifications / Licences

Required	• A Valid NSW Electrical licence with working knowledge of the latest version of AS/NZ 3000 wiring rules. • Industrial Instrumentation certificate • Cabling Licence • A current NSW drivers' licence
Desired	•

Experience

Required	• Thorough knowledge and extensive experience in the commissioning and operation of IICATS/SCADA or process control systems. • Minimum 5 years demonstrated experience in switchboard wiring and modification of power, control and instrumentation circuits. (VSD's, Soft Starters, PLC's, RTU's, Instrumentation) • Extensive experience demonstrating the ability to review electrical drawings • Working knowledge of the operation of water and waste water systems relating to Sydney Water's provision of total service to customers. • Proven experience in IICATS/SCADA commissioning processes as applied to water and wastewater system assets. • Working knowledge of SCADA communication networks (LAN and WAN) • Demonstrated ability and experience in using software tools for the commissioning & problem solving of configuration software for IICATS/SCADA systems • Experience in recommending new technology and/or procedures to improve the operation of control and monitoring systems • Working knowledge of effective quality control and audit trail in both engineering and system administrative functions. • Well-developed communication skills, both written and oral and the ability to liaise with Sydney Water • Corporation's personnel and external parties at all levels
Desired	•

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Capabilities and Skills

The capability and skill requirements for this role are identified in the skills profile listed below. This is comprised of Enterprise Capabilities, that are essential for all roles and functional skills, which are specific to each role.

Enterprise Capabilities (C-E)	
Capability	**Descriptor**
Accountability	Ensures that own actions and those of others are focused on achieving goals and owning the outcome, in a safe, inclusive collaborative way.
Agility	Adapts readily to change and encourages alternative views by using a range of interpersonal communication skills. Develops and coach's others while being aware of impact on others.
Innovation	Develops innovative outcomes to solve problems in ways that are not immediately evident and encourages new ideas and thinking in others.

Functional Skills			
Skill	**Priority**	**Essential or Desirable**	**Proficiency level**
Commissioning	1	Essential	Advanced
Troubleshooting (Problem Solving)	2	Essential	Advanced
Technical Support	3	Essential	Advanced
Acceptance Testing	4	Essential	Advanced
Compliance	5	Essential	Intermediate
Negotiation	6	Essential	Intermediate
Witness testing	7	Essential	Intermediate
Quality Control	8	Essential	Intermediate
Thought Leadership	9	Desirable	Intermediate
Automation Controls	10	Desirable	Intermediate

Proficiency Level Descriptors

Developing - Building practical experience, needs continued coaching.

Intermediate - Independent execution, minimal guidance**.**

Advanced - Fully independent execution, coaches' others.

Mastery - Strategic, sought as expert internally and externally.

Additional notes

Sydney Water takes the safe provision of its services to the public and the protection of its information assets extremely seriously. As a Sydney Water employee, you are required to understand your obligations under the Acceptable Use of Information Technology Policy and how Sydney Water's Information Technology is to be used. You must also help keep your workplace secure by ensuring you do not enable non-authorised people access to sites, maintain the integrity of locked entries and exits, and where appropriate, alarms being engaged.

Sydney Water requires all users to embrace and adhere to all enterprise and protective security policies, awareness programs and frameworks for Sydney Water assets.