



Position Description

Position title:	Smart Grid Systems Engineer
Reports to:	Manager Communication Networks Quality
Business unit:	Electricity Networks
Employment category:	Employment Agreement

About CitiPower and Powercor

As electricity distribution companies we provide safe, reliable and affordable power to 1.9 million Victorian customers. We use our network of poles, wires and infrastructure to bring power to homes and businesses across almost 65% of Victoria — that’s more than 120,000 kilometres of wires and 850,000 poles.

But we do so much more than manage poles and wires. We’re also the gateway to a clean energy future, dedicated to finding solutions and harnessing new technology to benefit our customers, communities and the environment. This includes industry leading projects in community batteries, demand management, smart charging for electric vehicles (EVs) and microgrids.

And as more customers choose solar, batteries, EVs and smart appliances — the electricity system is becoming increasingly complex, and so too is the level of innovation required to manage it.

About the Electricity Networks team you’ll be part of

The Electricity Networks team is responsible for the efficient and effective management of our electricity distribution networks and assets. They do this through developing engineering standards, asset strategies and long-term views of the network, network planning, investing in future network technology, asset maintenance planning, network safety and compliance management and bushfire mitigation strategies.

Our core values



Live safely



Improve our business



Be customer and community minded



Be the best you can be



Succeed together

Purpose of the position

The Smart Grid Systems Engineer plays a key role in the deployment, operation, and maintenance of the VPN and UE Advanced Metering Infrastructure (AMI) system and communications network. This position is responsible for ensuring the reliability and efficiency of smart metering and network communications systems, managing system performance, resolving technical faults, and analysing data to optimize system functionality. The engineer will collaborate closely with both internal and external stakeholders to troubleshoot issues, ensure compliance and identify and implement continuous improvements. This position is essential to improving the AMI and communications network performance and enhancing operational reliability and efficiency.

Your key responsibilities

System Design and Deployment

- Lead the design, configuration, and installation of AMI systems and smart metering devices, including new deployments, upgrades, patches, and enhancements.
- Ensure system architecture aligns with the utility's overall AMI network modernization plan.
- Collaborate with vendors and third-party providers on equipment and software integration.
- Evaluate and recommend upgrades to metering technology and infrastructure.
- Ensure compliance with industry standards and regulatory requirements during design, deployment, and operations.
- Develop detailed project plans and timelines for system deployments, upgrades, patches, and enhancements.
- Provide technical leadership and training to field teams during installation, commissioning processes, and system upgrades.

System Operation and Monitoring

- Monitor the performance of AMI and communications networks and smart meters to ensure continuous, accurate data collection, achieving or exceeding regulatory and yearly performance targets.
- Develop performance metrics, reports, and dashboards to track system efficiency as well as overall operational efficiency and performance.
- Participate in the day-to-day management of smart metering and communications network systems, including troubleshooting and resolving issues, and perform root cause analysis on operational issues to implement corrective measures.
- Raise field work orders for non-performing devices and manage the work order process to ensure timely resolution of issues.
- Implement operational procedures and best practices to minimize system downtime and service interruptions across all AMI components, including communication networks, access points, relays, and meters, ensuring quick recovery from any incidents.
- Collaborate with vendors and internal teams, including IT, analytics, field support, and others, to maintain system integrity and security.
- Ensure compliance with internal controls, operational guidelines, and regulatory requirements, while maintaining detailed documentation of system operations, procedures, and incidents.

Integration of New Devices and Technologies and Upgrades

- Evaluate, select, and integrate new devices and technologies into the existing AMI and communications network system.
- Develop and execute testing procedures for new systems, upgrades, and firmware deployments to ensure optimal performance, compliance with standards, ensuring compatibility and interoperability.
- Perform regular maintenance checks and audits, identifying areas for improvement and recommending enhancements to system performance.
- Conduct field inspections and troubleshooting for system failures, implementing corrective actions as needed.
- Implement quality control measures and collaborate with cross-functional teams to validate system performance post-upgrade or change.
- Document and analyse test results and maintenance activities, providing feedback for continuous improvement and ensuring smooth transitions during upgrades and patches.

Fault and Issue Management

- Lead the identification, diagnosis, and resolution of faults within the AMI and communications network and smart metering devices, ensuring timely action to minimize service disruptions.
- Develop and maintain issue management procedures, including escalation processes for critical failures and tracking of recurring issues.
- Utilize data analysis tools to monitor system performance, identify potential risks, and predict future failures, suggesting preventive measures.
- Collaborate with field teams to conduct on-site inspections, repairs, and troubleshooting of metering systems and infrastructure.
- Generate detailed reports on system failures, trends, and implemented solutions to guide continuous improvement efforts and facilitate communication with vendors and support teams.

Vendor and Stakeholder Management

- Coordinate with AMI technology vendors to ensure timely support, updates, and troubleshooting of AMI systems and smart metering devices while serving as the primary liaison for communication between vendors and internal teams.
- Manage relationships with internal stakeholders, including IT, metering asset management, meter data management, meter completions/connections, and analytics teams, to align on operational objectives and identify areas requiring vendor support.
- Collaborate with field support teams to gather feedback on system performance and identify recurring issues that necessitate vendor intervention, conducting regular check-ins with vendors for updates and support needs.
- Develop and maintain a knowledge base of common issues and solutions to improve response times for field support and internal stakeholders.
- Track vendor performance metrics related to support responsiveness and issue resolution, ensuring continuous improvement in service delivery.

What you'll bring to the business

Education / Qualifications:

- Degree: Bachelor's degree in Electrical Engineering, Electronics Engineering, Communications Engineering, Computer Science, Information Technology, or a related field.
- Certifications: Relevant certifications in project management, data analysis, or smart grid technologies are a plus.

Knowledge:

- In-depth understanding of smart metering systems, AMI components, and related technologies.
- Strong technical proficiency in configuring, troubleshooting, and maintaining AMI systems and related hardware/software.
- Knowledge of communication networks, protocols, and data transmission methods used in AMI systems.
- Familiarity with industry standards, regulations, and compliance requirements for utility operations and smart grid technologies
- Ability to analyse complex data sets, identify trends, and generate actionable insights.
- Proficient in data analysis techniques and tools for performance monitoring and troubleshooting. (e.g. Advanced Microsoft Excel, MS Access/Oracle databases, Python, VBA)
- Excellent troubleshooting and problem-solving skills to address operational issues effectively.
- Ability to manage multiple projects and prioritize tasks in a fast-paced environment.
- Strong verbal and written communication skills for effective collaboration with internal teams, vendors, and stakeholders.
- Itron UIQ AMM, SIQ, Network Centre and Gridscape usage would be well regarded.

Experience:

- At least 3 years of experience in smart metering, AMI systems, or related fields within the utility or energy sector.
- A solid AMI Metering and wireless communications system design and testing background.
- Strong background in systems and device fault finding and problem-solving skills.
- Proven ability to deploy, maintain, and troubleshoot smart metering systems in real-world environments.
- Skilled in utilizing data analysis tools and techniques to monitor system performance, identify trends, and predict potential issues or failures.
- Demonstrated capability in executing system testing, creating test plans, and implementing quality control measures for AMI systems and software or similar systems/technologies.
- Adept at working with vendors, third-party providers and internal teams to improve system performance and resolve technical challenges.

The skills and competencies you'll have

'Thought' competencies

1. Tech savvy: Anticipating and adopting innovations in business-building digital and technology solutions
2. Manages complexity: Making sense of complex, high quantity, and sometimes contradictory information to effectively solve problems
3. Decision Quality: Considers various points and uses good judgement to make decisions and recommendations, knowing when to act or escalate

'Result' competencies

1. Optimises work processes: Knowing the most effective and efficient processes to get things done, with a focus on continuous improvement
2. Action oriented: Taking on new opportunities and tough challenges with a sense of urgency, high energy, and enthusiasm
3. Plans and aligns: Planning and prioritising work to meet commitments aligned with organisational goals

'People' competencies

1. Communicates effectively: Developing and delivering multi-mode communications that convey a clear understanding of the unique needs of different audiences
2. Collaborates: Building partnerships and working collaboratively with others to meet shared objectives
3. Interpersonal savvy: Relating openly and comfortably with diverse groups of people

'Self' competencies

1. Nimble learning: Actively learning through experimentation when tackling new problems, using both successes and failures as learning fodder
2. Manages ambiguity: Operating effectively, even when things are not certain or the way forward is not clear
3. Situational adaptability: Adapting approach and demeanour in real time to match the shifting demands of different situations

Other relevant information

- Availability duty will be required
- Travel to other work locations / sites may be required
- Direct reports - FTE direct reports: Nil Contractor direct reports: Nil
- Budget: OPEX Nil, CAPEX Nil